

Giridhar Madras

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8239800/publications.pdf>

Version: 2024-02-01

570
papers

24,053
citations

9756

73
h-index

19690

117
g-index

580
all docs

580
docs citations

580
times ranked

24411
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Catalysis for NO _x abatement. <i>Applied Energy</i> , 2009, 86, 2283-2297. | 5.1 | 612 |
| 2 | Structure and Photocatalytic Activity of Ti _{1-x} M _x O ₂ (M = W, V, Ce, Zr, Fe, and Cu) Synthesized by Solution Combustion Method. <i>Journal of Physical Chemistry B</i> , 2004, 108, 20204-20212. | 1.2 | 536 |
| 3 | Synthesis and Structure of Nanocrystalline TiO ₂ with Lower Band Gap Showing High Photocatalytic Activity. <i>Langmuir</i> , 2004, 20, 2900-2907. | 1.6 | 519 |
| 4 | Solar photocatalytic degradation of dyes: high activity of combustion synthesized nano TiO ₂ . <i>Applied Catalysis B: Environmental</i> , 2004, 48, 83-93. | 10.8 | 355 |
| 5 | Photocatalytic degradation of various dyes by combustion synthesized nano anatase TiO ₂ . <i>Applied Catalysis B: Environmental</i> , 2003, 45, 23-38. | 10.8 | 345 |
| 6 | Synthesis of biodiesel in supercritical fluids. <i>Fuel</i> , 2004, 83, 2029-2033. | 3.4 | 334 |
| 7 | Noble Metal Ionic Catalysts. <i>Accounts of Chemical Research</i> , 2009, 42, 704-712. | 7.6 | 311 |
| 8 | Novel Photocatalysts for the Decomposition of Organic Dyes Based on Metal-Organic Framework Compounds. <i>Journal of Physical Chemistry B</i> , 2006, 110, 13759-13768. | 1.2 | 297 |
| 9 | Conducting polyaniline/nano-TiO ₂ composites for smart corrosion resistant coatings. <i>Electrochimica Acta</i> , 2009, 54, 1249-1254. | 2.6 | 283 |
| 10 | Photocatalytic Degradation of Organic Compounds over Combustion-Synthesized Nano-TiO ₂ . <i>Environmental Science & Technology</i> , 2004, 38, 1600-1604. | 4.6 | 281 |
| 11 | Ultrafast Microwave-Assisted Route to Surfactant-Free Ultrafine Pt Nanoparticles on Graphene: Synergistic Co-reduction Mechanism and High Catalytic Activity. <i>Chemistry of Materials</i> , 2011, 23, 2772-2780. | 3.2 | 257 |
| 12 | Adsorption of Sulfonated Dyes by Polyaniline Emeraldine Salt and Its Kinetics. <i>Journal of Physical Chemistry B</i> , 2008, 112, 10153-10157. | 1.2 | 245 |
| 13 | Synthesis of biodiesel from edible and non-edible oils in supercritical alcohols and enzymatic synthesis in supercritical carbon dioxide. <i>Fuel</i> , 2007, 86, 2650-2659. | 3.4 | 239 |
| 14 | Low-Temperature Selective Catalytic Reduction of NO with NH ₃ over Ti _{0.9} M _{0.1} O _{2-x} (M = Cr, Mn, Fe, Co, Cu). <i>Journal of Physical Chemistry C</i> , 2008, 112, 6002-6012. | 1.5 | 227 |
| 15 | Photocatalytic Degradation of Rhodamine Dyes with Nano-TiO ₂ . <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 7-14. | 1.8 | 225 |
| 16 | Adsorption and Desorption Kinetics of Anionic Dyes on Doped Polyaniline. <i>Journal of Physical Chemistry B</i> , 2009, 113, 2293-2299. | 1.2 | 184 |
| 17 | Synthesis of Biodiesel from Castor Oil and Linseed Oil in Supercritical Fluids. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 1-6. | 1.8 | 178 |
| 18 | Process induced electroactive β -polymorph in PVDF: effect on dielectric and ferroelectric properties. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 14792. | 1.3 | 173 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | High Oxygen Storage Capacity and High Rates of CO Oxidation and NO Reduction Catalytic Properties of Ce _{1-x} Sn _x O ₂ and Ce _{0.78} Sn _{0.2} Pd _{0.02} O ₂ . Journal of Physical Chemistry C, 2009, 113, 4059-4068. | 1.5 | 151 |
| 20 | Enzymatic degradation of polymers: A brief review. Materials Science and Technology, 2014, 30, 567-573. | 0.8 | 144 |
| 21 | Kinetics of Sonophotocatalytic Degradation of Anionic Dyes with Nano-TiO ₂ . Environmental Science & Technology, 2009, 43, 473-479. | 4.6 | 141 |
| 22 | Nanoscale ZnO/CdS heterostructures with engineered interfaces for high photocatalytic activity under solar radiation. Journal of Materials Chemistry, 2011, 21, 4209. | 6.7 | 141 |
| 23 | Intermittent electrical stimuli for guidance of human mesenchymal stem cell lineage commitment towards neural-like cells on electroconductive substrates. Biomaterials, 2014, 35, 6219-6235. | 5.7 | 133 |
| 24 | Kinetics of Simultaneous Photocatalytic Degradation of Phenolic Compounds and Reduction of Metal Ions with Nano-TiO ₂ . Environmental Science & Technology, 2008, 42, 913-919. | 4.6 | 132 |
| 25 | Layer-by-Layer Assembled Thin Films and Microcapsules of Nanocrystalline Cellulose for Hydrophobic Drug Delivery. ACS Applied Materials & Interfaces, 2014, 6, 20093-20101. | 4.0 | 130 |
| 26 | Origin of enhanced photocatalytic activity and photoconduction in high aspect ratio ZnO nanorods. Physical Chemistry Chemical Physics, 2013, 15, 10795. | 1.3 | 127 |
| 27 | Hierarchical Design of CuS Architectures for Visible Light Photocatalysis of 4-Chlorophenol. ACS Omega, 2017, 2, 4009-4021. | 1.6 | 126 |
| 28 | New empirical expressions to correlate solubilities of solids in supercritical carbon dioxide. Thermochimica Acta, 2010, 500, 123-127. | 1.2 | 125 |
| 29 | Photocatalytic degradation of Azure and Sudan dyes using nano TiO ₂ . Journal of Hazardous Materials, 2007, 149, 725-734. | 6.5 | 123 |
| 30 | Thermal degradation and mechanical properties of PET blends. Polymer Degradation and Stability, 2005, 90, 147-153. | 2.7 | 121 |
| 31 | Investigation of dye functional group on the photocatalytic degradation of dyes by nano-TiO ₂ . Journal of Hazardous Materials, 2010, 176, 765-773. | 6.5 | 121 |
| 32 | The effect of sulfate pre-treatment to improve the deposition of Au-nanoparticles in a gold-modified sulfated g-C ₃ N ₄ plasmonic photocatalyst towards visible light induced water reduction reaction. Physical Chemistry Chemical Physics, 2016, 18, 28502-28514. | 1.3 | 118 |
| 33 | Thermal degradation of binary physical mixtures and copolymers of poly(μ -caprolactone), poly(d, l) Tj ETQq1 1 0.784314 rgBT /Overload | 2.7 | 117 |
| 34 | Outstanding dielectric constant and piezoelectric coefficient in electrospun nanofiber mats of PVDF containing silver decorated multiwall carbon nanotubes: assessing through piezoresponse force microscopy. RSC Advances, 2016, 6, 6251-6258. | 1.7 | 111 |
| 35 | Kinetics of the photodegradation of substituted phenols by solution combustion synthesized TiO ₂ . Applied Catalysis B: Environmental, 2004, 51, 67-76. | 10.8 | 110 |
| 36 | Photocatalytic Activity of Combustion Synthesized ZrO ₂ and ZrO ₂ •TiO ₂ Mixed Oxides. Industrial & Engineering Chemistry Research, 2011, 50, 12915-12924. | 1.8 | 107 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Cocatalyst free Z-schematic enhanced H ₂ evolution over LaVO ₄ /BiVO ₄ composite photocatalyst using Ag as an electron mediator. Applied Catalysis B: Environmental, 2018, 220, 512-523. | 10.8 | 106 |
| 38 | Polyolefin based antibacterial membranes derived from PE/PEO blends compatibilized with amine terminated graphene oxide and maleated PE. Journal of Materials Chemistry A, 2014, 2, 17635-17648. | 5.2 | 104 |
| 39 | Highly efficient WO ₃ –ZnO mixed oxides for photocatalysis. RSC Advances, 2015, 5, 11895-11904. | 1.7 | 103 |
| 40 | Macroporous three-dimensional graphene oxide foams for dye adsorption and antibacterial applications. RSC Advances, 2016, 6, 1231-1242. | 1.7 | 99 |
| 41 | Kinetics of thermal degradation of poly(ϵ -caprolactone). Journal of Analytical and Applied Pyrolysis, 2003, 70, 631-647. | 2.6 | 96 |
| 42 | Molecular Weight Effect on the Dynamics of Polystyrene Degradation. Industrial & Engineering Chemistry Research, 1997, 36, 2019-2024. | 1.8 | 95 |
| 43 | Poly(vinylidene fluoride)-Based Flexible and Lightweight Materials for Attenuating Microwave Radiations. ACS Applied Materials & Interfaces, 2014, 6, 21151-21160. | 4.0 | 94 |
| 44 | Temperature effects on the transition from nucleation and growth to Ostwald ripening. Chemical Engineering Science, 2004, 59, 2753-2765. | 1.9 | 93 |
| 45 | Adsorption of anionic dyes on chitosan grafted poly(alkyl methacrylate)s. Chemical Engineering Journal, 2010, 158, 393-401. | 6.6 | 93 |
| 46 | Understanding the morphological effects of WO ₃ photocatalysts for the degradation of organic pollutants. Advanced Powder Technology, 2018, 29, 1591-1600. | 2.0 | 93 |
| 47 | Conjugated Polymers for Photocatalysis. Journal of Physical Chemistry B, 2007, 111, 7994-7998. | 1.2 | 89 |
| 48 | CO methanation toward the production of synthetic natural gas over highly active Ni/TiO ₂ catalyst. AIChE Journal, 2014, 60, 1027-1035. | 1.8 | 88 |
| 49 | Photocatalytic degradation of nitrobenzenes with combustion synthesized nano-TiO ₂ . Journal of Photochemistry and Photobiology A: Chemistry, 2006, 178, 1-7. | 2.0 | 87 |
| 50 | In vitro/In vivo assessment and mechanisms of toxicity of bioceramic materials and its wear particulates. RSC Advances, 2014, 4, 12763. | 1.7 | 87 |
| 51 | Supercritical fluid regeneration of activated carbon loaded with heavy molecular weight organics. Industrial & Engineering Chemistry Research, 1993, 32, 1163-1168. | 1.8 | 85 |
| 52 | Degradation kinetics of polymers in solution: Dynamics of molecular weight distributions. AIChE Journal, 1997, 43, 802-810. | 1.8 | 85 |
| 53 | Photocatalytic activity of Ag-substituted and impregnated nano-TiO ₂ . Applied Catalysis A: General, 2009, 366, 130-140. | 2.2 | 85 |
| 54 | Dye sensitized visible light degradation of phenolic compounds. Chemical Engineering Journal, 2010, 165, 784-797. | 6.6 | 85 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Photocatalytic Degradation of Dyes and Organics with Nanosized GdCoO ₃ . Journal of Physical Chemistry C, 2007, 111, 1665-1674. | 1.5 | 83 |
| 56 | Photocatalytic reduction of metals in presence of combustion synthesized nano-TiO ₂ . Catalysis Communications, 2008, 9, 630-634. | 1.6 | 82 |
| 57 | Photocatalytic inactivation of E. Coli by ZnO@Ag nanoparticles under solar radiation. RSC Advances, 2015, 5, 51067-51077. | 1.7 | 82 |
| 58 | Engineering Nanostructures by Decorating Magnetic Nanoparticles onto Graphene Oxide Sheets to Shield Electromagnetic Radiations. ACS Applied Materials & Interfaces, 2015, 7, 16266-16278. | 4.0 | 82 |
| 59 | High rates of NO and N ₂ O reduction by CO, CO and hydrocarbon oxidation by O ₂ over nano crystalline Ce _{0.98} Pd _{0.02} O ₂ : Catalytic and kinetic studies. Applied Catalysis B: Environmental, 2007, 71, 23-31. | 10.8 | 81 |
| 60 | New Insights into Selective Heterogeneous Nucleation of Metal Nanoparticles on Oxides by Microwave-Assisted Reduction: Rapid Synthesis of High-Activity Supported Catalysts. ACS Nano, 2011, 5, 8049-8061. | 7.3 | 81 |
| 61 | Degradation of Poly(methyl methacrylate) in Solution. Industrial & Engineering Chemistry Research, 1996, 35, 1795-1800. | 1.8 | 80 |
| 62 | Evolution to Similarity Solutions for Fragmentation and Aggregation. Journal of Colloid and Interface Science, 1998, 201, 200-209. | 5.0 | 80 |
| 63 | Thermal degradation of poly (ϵ -caprolactone). Polymer Degradation and Stability, 2003, 80, 11-16. | 2.7 | 80 |
| 64 | Crystal structures and photocatalysis of the triclinic polymorphs of BiNbO ₄ and BiTaO ₄ . Journal of Solid State Chemistry, 2006, 179, 3919-3925. | 1.4 | 80 |
| 65 | Adsorption-desorption and photocatalytic properties of inorganic-organic hybrid cadmium thiosulfate compounds. Physical Chemistry Chemical Physics, 2009, 11, 11285. | 1.3 | 80 |
| 66 | Effect of morphology of zinc oxide in ZnO-CdS-Ag ternary nanocomposite towards photocatalytic inactivation of E. coli under UV and visible light. Chemical Engineering Journal, 2017, 307, 966-980. | 6.6 | 80 |
| 67 | Ostwald ripening with size-dependent rates: Similarity and power-law solutions. Journal of Chemical Physics, 2002, 117, 8042-8049. | 1.2 | 79 |
| 68 | Supercritical carbon dioxide extraction of organics from soil. Environmental Science & Technology, 1993, 27, 1225-1231. | 4.6 | 78 |
| 69 | Discrete and continuous models for polymerization and depolymerization. Chemical Engineering Science, 2001, 56, 2831-2836. | 1.9 | 78 |
| 70 | Kinetics and mechanism of dye adsorption on WO ₃ nanoparticles. Applied Surface Science, 2017, 420, 472-482. | 3.1 | 78 |
| 71 | Effect of initial molecular weight and solvents on the ultrasonic degradation of poly(ethylene) Tj ETQq1 1 0.784314, rBT /Overlock 10 T | 2.7 | 77 |
| 72 | A novel sheet 4f-3d mixed-metal pyridine dicarboxylate: synthesis, structure, photophysical properties and its transformation to a perovskite oxide. Chemical Communications, 2005, , 5787. | 2.2 | 77 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Continuous distribution kinetics for ultrasonic degradation of polymers. <i>Polymer Degradation and Stability</i> , 2000, 69, 73-78. | 2.7 | 76 |
| 74 | Analytical solution for a population balance equation with aggregation and fragmentation. <i>Chemical Engineering Science</i> , 2003, 58, 3049-3051. | 1.9 | 76 |
| 75 | Synthesis of biodiesel in supercritical alcohols and supercritical carbon dioxide. <i>Fuel</i> , 2010, 89, 1641-1646. | 3.4 | 75 |
| 76 | Influence of CeO ₂ morphology on the catalytic activity of CeO ₂ @Pt hybrids for CO oxidation. <i>Dalton Transactions</i> , 2013, 42, 15343. | 1.6 | 74 |
| 77 | Flexible EMI shielding materials derived by melt blending PVDF and ionic liquid modified MWNTs. <i>Materials Research Express</i> , 2014, 1, 035003. | 0.8 | 74 |
| 78 | Morphology controllable microwave absorption property of polyvinylbutyral (PVB)-MnO ₂ nanocomposites. <i>Composites Part B: Engineering</i> , 2018, 132, 188-196. | 5.9 | 74 |
| 79 | Cooperativity and Structural Relaxations in PVDF/PMMA Blends in the Presence of MWNTs: An Assessment through SAXS and Dielectric Spectroscopy. <i>Macromolecules</i> , 2014, 47, 1392-1402. | 2.2 | 72 |
| 80 | Synthesis, Characterization and Photocatalytic Activity of Lanthanide (Ce, Pr and Nd) Orthovanadates. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 1013-1017. | 1.8 | 71 |
| 81 | Multivalent Cu-Doped ZnO Nanoparticles with Full Solar Spectrum Absorbance and Enhanced Photoactivity. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 5895-5904. | 1.8 | 71 |
| 82 | Temperature effects during Ostwald ripening. <i>Journal of Chemical Physics</i> , 2003, 119, 1683-1693. | 1.2 | 70 |
| 83 | Enzymatic Synthesis of Ethyl Palmitate in Supercritical Carbon Dioxide. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 1568-1573. | 1.8 | 70 |
| 84 | Kinetics of TiO ₂ -Catalyzed Ultrasonic Degradation of Rhodamine Dyes. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 913-921. | 1.8 | 70 |
| 85 | Introducing saccharic acid as an efficient iron chelate to enhance photo-Fenton degradation of organic contaminants. <i>Water Research</i> , 2016, 104, 168-177. | 5.3 | 70 |
| 86 | Enzymatic and Thermal Degradation of Poly(ϵ -caprolactone), Poly(D,L-lactide), and Their Blends. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 7702-7709. | 1.8 | 69 |
| 87 | Solubilities of solids in supercritical fluids using dimensionally consistent modified solvate complex models. <i>Fluid Phase Equilibria</i> , 2009, 283, 97-101. | 1.4 | 69 |
| 88 | Catalytic performance of highly dispersed Ni/TiO ₂ for dry and steam reforming of methane. <i>RSC Advances</i> , 2014, 4, 4817. | 1.7 | 69 |
| 89 | Industrial waste fly ash cenosphere composites based broad band microwave absorber. <i>Composites Part B: Engineering</i> , 2018, 134, 151-163. | 5.9 | 69 |
| 90 | Optimization of rheological properties of photopolymerizable alumina suspensions for ceramic microstereolithography. <i>Ceramics International</i> , 2014, 40, 3655-3665. | 2.3 | 67 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Effect of solvent on the ultrasonic degradation of poly(vinyl acetate). <i>Polymer Degradation and Stability</i> , 2001, 71, 273-278. | 2.7 | 66 |
| 92 | Multilayer Self-Assembly of TiO ₂ Nanoparticles and Polyaniline- <i>Grafted</i> -Chitosan Copolymer (CPANI) for Photocatalysis. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 84-92. | 4.0 | 66 |
| 93 | New Insights into Electronic and Geometric Effects in the Enhanced Photoelectrooxidation of Ethanol Using ZnO Nanorod/Ultrathin Au Nanowire Hybrids. <i>Journal of the American Chemical Society</i> , 2014, 136, 14445-14455. | 6.6 | 66 |
| 94 | Detailed mechanism and kinetic study of CO oxidation on cobalt oxide surfaces. <i>Applied Catalysis A: General</i> , 2015, 504, 463-475. | 2.2 | 66 |
| 95 | Electromagnetic interference shielding effectiveness of polyaniline-nickel oxide coated cenosphere composite film. <i>Composites Communications</i> , 2017, 4, 37-42. | 3.3 | 66 |
| 96 | Photocatalytic degradation with combustion synthesized WO ₃ and WO ₃ TiO ₂ mixed oxides under UV and visible light. <i>Separation and Purification Technology</i> , 2013, 105, 79-89. | 3.9 | 65 |
| 97 | Synthesis, characterization and thermal degradation of dual temperature- and pH-sensitive RAFT-made copolymers of <i>N,N</i> -(dimethylamino)ethyl methacrylate and methyl methacrylate. <i>Polymer International</i> , 2013, 62, 463-473. | 1.6 | 65 |
| 98 | Solubilities of palmitic and stearic fatty acids in supercritical carbon dioxide. <i>Journal of Chemical Thermodynamics</i> , 2010, 42, 193-197. | 1.0 | 64 |
| 99 | Effect of Metal Oxides on Thermal Degradation of Poly(vinyl acetate) and Poly(vinyl chloride) and Their Blends. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 3647-3653. | 1.8 | 63 |
| 100 | Photocatalytic degradation of poly(ethylene oxide) and polyacrylamide. <i>Journal of Applied Polymer Science</i> , 2006, 100, 3997-4003. | 1.3 | 63 |
| 101 | Synthesis, characterization, degradation of biodegradable castor oil based polyesters. <i>Polymer Degradation and Stability</i> , 2011, 96, 1695-1704. | 2.7 | 63 |
| 102 | Biofunctionalized surface-modified silver nanoparticles for gene delivery. <i>Journal of Materials Chemistry B</i> , 2015, 3, 5266-5276. | 2.9 | 62 |
| 103 | Novel AgBr/Ag ₃ PO ₄ Decorated Ceria Nanoflake Composites for Enhanced Photocatalytic Activity toward Dyes and Bacteria under Visible Light. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 8031-8042. | 1.8 | 62 |
| 104 | Shape memory polyurethane nanocomposites with porous architectures for enhanced microwave shielding. <i>Chemical Engineering Journal</i> , 2018, 352, 590-600. | 6.6 | 62 |
| 105 | Modeling of supercritical extraction of organics from solid matrices. <i>AIChE Journal</i> , 1994, 40, 777-785. | 1.8 | 61 |
| 106 | Thermal degradation of poly(β -methylstyrene) in solution. <i>Polymer Degradation and Stability</i> , 1996, 52, 349-358. | 2.7 | 61 |
| 107 | Heterojunction ZnWO ₄ /ZnFe ₂ O ₄ composites with concerted effects and integrated properties for enhanced photocatalytic hydrogen evolution. <i>Catalysis Science and Technology</i> , 2018, 8, 1083-1093. | 2.1 | 61 |
| 108 | Distribution kinetics theory of Ostwald ripening. <i>Journal of Chemical Physics</i> , 2001, 115, 6699-6706. | 1.2 | 60 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 109 | Creation of Redox Adsorption Sites by Pd ²⁺ Ion Substitution in nanoTiO ₂ for High Photocatalytic Activity of CO Oxidation, NO Reduction, and NO Decomposition. <i>Journal of Physical Chemistry C</i> , 2007, 111, 8153-8160. | 1.5 | 60 |
| 110 | Higher Catalytic Activity of Nano-Ce _{1-x} Y _x Ti _{1-y} Pd _y O _{2-δ} Compared to Nano-Ce _{1-x} Pd _x O _{2-δ} for CO Oxidation and N ₂ O and NO Reduction by CO: Role of Oxide Ion Vacancy. <i>Journal of Physical Chemistry C</i> , 2007, 111, 830-839. | 1.5 | 60 |
| 111 | Synthesis and characterization of flexible epoxy nanocomposites reinforced with amine functionalized aluminan nanoparticles: a potential encapsulant for organic devices. <i>Polymer Chemistry</i> , 2011, 2, 221-228. | 1.9 | 60 |
| 112 | Nanostructured Pd modified Ni/CeO ₂ catalyst for water gas shift and catalytic hydrogen combustion reaction. <i>Applied Catalysis B: Environmental</i> , 2013, 132-133, 28-38. | 10.8 | 60 |
| 113 | Electrically driven intracellular and extracellular nanomanipulators evoke neurogenic/cardiomyogenic differentiation in human mesenchymal stem cells. <i>Biomaterials</i> , 2016, 77, 26-43. | 5.7 | 60 |
| 114 | Time evolution to similarity solutions for polymer degradation. <i>AIChE Journal</i> , 1998, 44, 647-655. | 1.8 | 59 |
| 115 | Effect of temperature on the ultrasonic degradation of polyacrylamide and poly(ethylene oxide). <i>Polymer Degradation and Stability</i> , 2004, 84, 341-344. | 2.7 | 59 |
| 116 | Kinetics of photocatalytic degradation of phenols with multiple substituent groups. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 179, 256-262. | 2.0 | 59 |
| 117 | Poly(vinyl butyral) -polyaniline-magnetically functionalized fly ash cenosphere composite film for electromagnetic interference shielding. <i>Composites Part B: Engineering</i> , 2016, 106, 224-233. | 5.9 | 59 |
| 118 | Sonochemical synthesis of Pt, Ru doped TiO ₂ for methane reforming. <i>Applied Catalysis A: General</i> , 2016, 518, 102-114. | 2.2 | 59 |
| 119 | An association model for the solubilities of pharmaceuticals in supercritical carbon dioxide. <i>Thermochimica Acta</i> , 2010, 507-508, 99-105. | 1.2 | 58 |
| 120 | Swelling and Dye-Adsorption Characteristics of an Amphoteric Superabsorbent Polymer. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 14941-14948. | 1.8 | 58 |
| 121 | Synergistic effect of co-existence of hematite (α-Fe ₂ O ₃) and magnetite (Fe ₃ O ₄) nanoparticles on graphene sheet for dye adsorption. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 26-37. | 3.3 | 58 |
| 122 | Thermal degradation kinetics of thermoresponsive poly(N-isopropylacrylamide-co-N,N-dimethylacrylamide) copolymers prepared via RAFT polymerization. <i>Journal of Thermal Analysis and Calorimetry</i> , 2013, 111, 753-761. | 2.0 | 57 |
| 123 | Kinetic Model for TiO ₂ Polymorphic Transformation from Anatase to Rutile. <i>Journal of the American Ceramic Society</i> , 2007, 90, 250-255. | 1.9 | 56 |
| 124 | High rates of CO and hydrocarbon oxidation and NO reduction by CO over Ti _{0.99} Pd _{0.01} O _{1.99} . <i>Applied Catalysis B: Environmental</i> , 2007, 73, 300-310. | 10.8 | 56 |
| 125 | Pd and Pt ions as highly active sites for the water-gas shift reaction over combustion synthesized zirconia and zirconia-modified ceria. <i>Applied Catalysis B: Environmental</i> , 2010, 96, 83-93. | 10.8 | 56 |
| 126 | Novel insights into the properties of AgBiO ₃ photocatalyst and its application in immobilized state for 4-nitrophenol degradation and bacteria inactivation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 373, 105-115. | 2.0 | 56 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 127 | Kinetics of Photocatalytic Degradation of Chlorophenol, Nitrophenol, and Their Mixtures. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 482-486. | 1.8 | 55 |
| 128 | Photoconductive network structured copper oxide for simultaneous photoelectrocatalytic degradation of antibiotic (tetracycline) and bacteria (<i>E. coli</i>). <i>Chemical Engineering Journal</i> , 2018, 332, 757-774. | 6.6 | 55 |
| 129 | Thermal degradation kinetics of polystyrene in solution. <i>Polymer Degradation and Stability</i> , 1997, 58, 131-138. | 2.7 | 54 |
| 130 | Ultrasonic degradation of polybutadiene and isotactic polypropylene. <i>Polymer Degradation and Stability</i> , 2004, 85, 555-558. | 2.7 | 54 |
| 131 | Distribution kinetics of polymer crystallization and the Avrami equation. <i>Journal of Chemical Physics</i> , 2005, 122, 064901. | 1.2 | 54 |
| 132 | Ultrafast Self-Healable Interfaces in Polyurethane Nanocomposites Designed Using Diels-Alder-Click as an Efficient Microwave Absorber. <i>ACS Omega</i> , 2018, 3, 1137-1146. | 1.6 | 54 |
| 133 | The journey of self-healing and shape memory polyurethanes from bench to translational research. <i>Polymer Chemistry</i> , 2019, 10, 4370-4388. | 1.9 | 54 |
| 134 | Kinetic study of Z-scheme C3N4/CuWO4 photocatalyst towards solar light inactivation of mixed populated bacteria. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 372, 108-121. | 2.0 | 54 |
| 135 | Polymer Nanocomposites Containing Semiconductors as Advanced Materials for EMI Shielding. <i>ACS Omega</i> , 2020, 5, 4705-4718. | 1.6 | 54 |
| 136 | Microwave Synthesis and Photocatalytic Activity of Nano Lanthanide (Ce, Pr, and Nd) Orthovanadates. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 6509-6516. | 1.8 | 53 |
| 137 | Enhanced sunlight photocatalytic activity of Ag3PO4 decorated novel combustion synthesis derived TiO2 nanobelts for dye and bacterial degradation. <i>Photochemical and Photobiological Sciences</i> , 2015, 14, 1227-1237. | 1.6 | 53 |
| 138 | Mechanistic Insight into the Nature of Dopants in Graphene Derivatives Influencing Electromagnetic Interference Shielding Properties in Hybrid Polymer Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2019, 123, 2579-2590. | 1.5 | 53 |
| 139 | Enzymatic degradation of poly (μ -caprolactone), poly (vinyl acetate) and their blends by lipases. <i>Chemical Engineering Science</i> , 2003, 58, 2911-2919. | 1.9 | 52 |
| 140 | Rapid Synthesis of Ultrahigh Adsorption Capacity Zirconia by a Solution Combustion Technique. <i>Langmuir</i> , 2011, 27, 3578-3587. | 1.6 | 52 |
| 141 | Effect of inorganic ions, H2O2 and pH on the photocatalytic inactivation of <i>Escherichia coli</i> with silver impregnated combustion synthesized TiO2 catalyst. <i>Applied Catalysis B: Environmental</i> , 2011, 106, 453-459. | 10.8 | 52 |
| 142 | Solution Combustion Synthesis of Nanosized Copper Chromite and Its Use as a Burn Rate Modifier in Solid Propellants. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 10108-10116. | 1.8 | 51 |
| 143 | Cross-Linked, Biodegradable, Cytocompatible Salicylic Acid Based Polyesters for Localized, Sustained Delivery of Salicylic Acid: An In Vitro Study. <i>Biomacromolecules</i> , 2014, 15, 863-875. | 2.6 | 51 |
| 144 | Synthesis, Structure, Negative Thermal Expansion, and Photocatalytic Property of Mo Doped ZrV ₂ O ₇ . <i>Inorganic Chemistry</i> , 2011, 50, 8774-8781. | 1.9 | 50 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Kinetics of synthesis of butyl butyrate by esterification and transesterification in supercritical carbon dioxide. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 1135-1144. | 1.6 | 48 |
| 146 | Light weight, ultrathin, and "thermally-clickable" self-healing MWNT patch as electromagnetic interference suppressor. <i>Chemical Engineering Journal</i> , 2019, 366, 72-82. | 6.6 | 48 |
| 147 | Transition from nucleation and growth to Ostwald ripening. <i>Chemical Engineering Science</i> , 2002, 57, 3809-3818. | 1.9 | 47 |
| 148 | Solvent effects on the lipase catalyzed biodegradation of poly (ϵ -caprolactone) in solution. <i>Polymer Degradation and Stability</i> , 2003, 79, 413-418. | 2.7 | 47 |
| 149 | Blends of poly(ϵ -caprolactone) and poly(vinyl acetate): mechanical properties and thermal degradation. <i>Polymer Degradation and Stability</i> , 2004, 84, 345-351. | 2.7 | 47 |
| 150 | Covalent Grafting of Polydimethylsiloxane over Surface-Modified Alumina Nanoparticles. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 6585-6593. | 1.8 | 47 |
| 151 | Novel synergistic photocatalytic degradation of antibiotics and bacteria using V-doped TiO ₂ under visible light: the state of nitrogen in V-doped TiO ₂ . <i>New Journal of Chemistry</i> , 2016, 40, 3464-3475. | 1.4 | 47 |
| 152 | Remarkable enhancement of Fenton degradation at a wide pH range promoted by thioglycolic acid. <i>Chemical Communications</i> , 2017, 53, 1136-1139. | 2.2 | 47 |
| 153 | Oxidative degradation kinetics of polystyrene in solution. <i>Chemical Engineering Science</i> , 1997, 52, 2707-2713. | 1.9 | 46 |
| 154 | Synthesis and photocatalytic activity of poly(3-hexylthiophene)/TiO ₂ composites. <i>Journal of Solid State Chemistry</i> , 2007, 180, 2986-2989. | 1.4 | 46 |
| 155 | Photocatalytic properties of KBiO ₃ and LiBiO ₃ with tunnel structures. <i>Journal of Chemical Sciences</i> , 2011, 123, 517-524. | 0.7 | 46 |
| 156 | PVDF/PBSA membranes with strongly coupled phosphonium derivatives and graphene oxide on the surface towards antibacterial and antifouling activities. <i>Journal of Membrane Science</i> , 2018, 548, 203-214. | 4.1 | 46 |
| 157 | Supercritical extraction of organic contaminants from soil combined with adsorption onto activated carbon. <i>Environmental Progress</i> , 1994, 13, 45-50. | 0.8 | 45 |
| 158 | Reversible crystal growth "dissolution and aggregation" breakage: numerical and moment solutions for population balance equations. <i>Powder Technology</i> , 2004, 143-144, 297-307. | 2.1 | 45 |
| 159 | Porous membranes designed from bi-phasic polymeric blends containing silver decorated reduced graphene oxide synthesized via a facile one-pot approach. <i>RSC Advances</i> , 2015, 5, 32441-32451. | 1.7 | 45 |
| 160 | Multi-layered stack consisting of PVDF nanocomposites with flow-induced oriented MWCNT structure can suppress electromagnetic radiation. <i>Composites Part B: Engineering</i> , 2019, 166, 749-757. | 5.9 | 45 |
| 161 | Esterification of myristic acid in supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2003, 27, 55-64. | 1.6 | 44 |
| 162 | Unique nanoporous antibacterial membranes derived through crystallization induced phase separation in PVDF/PMMA blends. <i>Journal of Materials Chemistry A</i> , 2015, 3, 5991-6003. | 5.2 | 44 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 163 | Adsorption kinetics of dyes and their mixtures with Co ₃ O ₄ –ZrO ₂ composites. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 2684-2696. | 3.3 | 44 |
| 164 | Effect of the chain length of the acid on the enzymatic synthesis of flavors in supercritical carbon dioxide. <i>Biochemical Engineering Journal</i> , 2005, 23, 199-202. | 1.8 | 43 |
| 165 | Degradation of polycaprolactone in supercritical fluids. <i>Polymer Degradation and Stability</i> , 2008, 93, 1901-1908. | 2.7 | 43 |
| 166 | Photocatalytic inactivation of <i>Escherichia coli</i> and <i>Pichia pastoris</i> with combustion synthesized titanium dioxide. <i>Chemical Engineering Journal</i> , 2010, 165, 225-233. | 6.6 | 43 |
| 167 | Layer-by-Layer Assembled Thin Film of Albumin Nanoparticles for Delivery of Doxorubicin. <i>Journal of Physical Chemistry C</i> , 2012, 116, 5333-5341. | 1.5 | 43 |
| 168 | A critical review on in situ reduction of graphene oxide during preparation of conducting polymeric nanocomposites. <i>RSC Advances</i> , 2015, 5, 32078-32087. | 1.7 | 43 |
| 169 | Visible light driven efficient N and Cu co-doped ZnO for photoinactivation of <i>Escherichia coli</i> . <i>RSC Advances</i> , 2016, 6, 85675-85687. | 1.7 | 43 |
| 170 | Outstanding electromagnetic interference shielding effectiveness of polyvinylbutyral–polyaniline nanocomposite film. <i>RSC Advances</i> , 2016, 6, 79058-79065. | 1.7 | 43 |
| 171 | Piezoelectric Response in Electrospun Poly(vinylidene fluoride) Fibers Containing Fluoro-Doped Graphene Derivatives. <i>ACS Omega</i> , 2018, 3, 5317-5326. | 1.6 | 43 |
| 172 | Kinetics of microwave-assisted polymerization of ϵ -caprolactone. <i>Journal of Applied Polymer Science</i> , 2004, 91, 1450-1456. | 1.3 | 42 |
| 173 | Modeling of Lipase Catalyzed Ring-Opening Polymerization of ϵ -Caprolactone. <i>Biomacromolecules</i> , 2004, 5, 603-609. | 2.6 | 42 |
| 174 | Solubilities of Hexadecanoic and Octadecanoic Acids in Supercritical CO ₂ With and Without Cosolvents. <i>Journal of Chemical & Engineering Data</i> , 2008, 53, 2913-2917. | 1.0 | 42 |
| 175 | Microwave Assisted Synthesis of Nanostructured Titanium Dioxide with High Photocatalytic Activity. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 9636-9643. | 1.8 | 42 |
| 176 | Million-Fold Decrease in Polymer Moisture Permeability by a Graphene Monolayer. <i>ACS Nano</i> , 2016, 10, 6501-6509. | 7.3 | 42 |
| 177 | A designer membrane tool-box with a mixed metal organic framework and RAFT-synthesized antibacterial polymer perform in tandem towards desalination, antifouling and heavy metal exclusion. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16664-16679. | 5.2 | 42 |
| 178 | Journey of Electroactive β -Polymorph of Poly(vinylidene fluoride) from Crystal Growth to Design to Applications. <i>Crystal Growth and Design</i> , 2019, 19, 5441-5456. | 1.4 | 42 |
| 179 | Mussel-Inspired Self-Healing Polyurethane with α -Flower-like Magnetic MoS ₂ as Efficient Microwave Absorbers. <i>ACS Applied Polymer Materials</i> , 2019, 1, 2417-2429. | 2.0 | 42 |
| 180 | Support-dependent activity of noble metal substituted oxide catalysts for the water gas shift reaction. <i>AIChE Journal</i> , 2010, 56, 2662-2676. | 1.8 | 41 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 181 | Visible light photocatalytic inactivation of Escherichia coli with combustion synthesized TiO ₂ . Chemical Engineering Journal, 2012, 189-190, 101-107. | 6.6 | 41 |
| 182 | The Key Role of Modifications in Biointerfaces toward Rendering Antibacterial and Antifouling Properties in Polymeric Membranes for Water Remediation: A Critical Assessment. Advanced Sustainable Systems, 2019, 3, 1900017. | 2.7 | 41 |
| 183 | Sustainable photocatalytic water remediation via dual active strongly coupled AgBiO ₃ on PVDF/PBSA membranes. Chemical Engineering Journal, 2020, 394, 124777. | 6.6 | 41 |
| 184 | Reversible Swelling/Deswelling Characteristics of Ethylene Glycol Dimethacrylate Cross-Linked Poly(acrylic acid-co-sodium acrylate-co-acrylamide) Superabsorbents. Industrial & Engineering Chemistry Research, 2011, 50, 10918-10927. | 1.8 | 40 |
| 185 | Combinatorial Approach to Develop Tailored Biodegradable Poly(xylitol dicarboxylate) Polyesters. Biomacromolecules, 2014, 15, 4302-4313. | 2.6 | 40 |
| 186 | Dendron conjugation to graphene oxide using click chemistry for efficient gene delivery. RSC Advances, 2015, 5, 50196-50211. | 1.7 | 40 |
| 187 | Copolyesters from Soybean Oil for Use as Resorbable Biomaterials. ACS Sustainable Chemistry and Engineering, 2015, 3, 880-891. | 3.2 | 40 |
| 188 | Electromagnetic interference shielding efficiency of MnO ₂ nanorod doped polyaniline film. Materials Research Express, 2017, 4, 025013. | 0.8 | 40 |
| 189 | Role of Hydrogen and Oxygen Activation over Pt and Pd-Doped Composites for Catalytic Hydrogen Combustion. ACS Applied Materials & Interfaces, 2017, 9, 19380-19388. | 4.0 | 40 |
| 190 | Enhanced photocatalysis and bacterial inhibition in Nb ₂ O ₅ via versatile doping with metals (Sr, Y, Zr, and Ag): a critical assessment. Nanoscale Advances, 2019, 1, 2748-2760. | 2.2 | 40 |
| 191 | Syngas production via CO ₂ reforming of methane over noble metal (Ru, Pt, and Pd) doped LaAlO ₃ perovskite catalyst. Molecular Catalysis, 2020, 484, 110805. | 1.0 | 40 |
| 192 | Molecular-weight distribution kinetics for ultrasonic reactions of polymers. AIChE Journal, 2001, 47, 2341-2348. | 1.8 | 39 |
| 193 | Numerical and Similarity Solutions for Reversible Population Balance Equations with Size-Dependent Rates. Journal of Colloid and Interface Science, 2002, 246, 356-365. | 5.0 | 39 |
| 194 | New photocatalysts based on mixed-metal pyridine dicarboxylates. Catalysis Letters, 2007, 115, 27-32. | 1.4 | 39 |
| 195 | Low temperature NO _x and N ₂ O reduction by H ₂ : Mechanism and development of new nano-catalysts. Applied Catalysis B: Environmental, 2008, 84, 341-350. | 10.8 | 39 |
| 196 | Nondeactivating Nanosized Ionic Catalysts for Water-Gas Shift Reaction. Industrial & Engineering Chemistry Research, 2009, 48, 6535-6543. | 1.8 | 39 |
| 197 | Polyvinylidene fluoride based lightweight and corrosion resistant electromagnetic shielding materials. RSC Advances, 2015, 5, 35909-35916. | 1.7 | 39 |
| 198 | Chitosan Immobilized Porous Polyolefin As Sustainable and Efficient Antibacterial Membranes. ACS Sustainable Chemistry and Engineering, 2016, 4, 862-870. | 3.2 | 39 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 199 | Solar-Light-Driven Improved Photocatalytic Performance of Hierarchical ZnIn ₂ S ₄ Architectures. ACS Omega, 2017, 2, 6926-6938. | 1.6 | 39 |
| 200 | Modeling the solubilities of fatty acids in supercritical carbon dioxide. Fluid Phase Equilibria, 2003, 209, 207-213. | 1.4 | 38 |
| 201 | Effects of the pH, concentration, and solvents on the ultrasonic degradation of poly(vinyl alcohol). Journal of Applied Polymer Science, 2006, 100, 4888-4892. | 1.3 | 38 |
| 202 | Long-Term Sustained Release of Salicylic Acid from Cross-Linked Biodegradable Polyester Induces a Reduced Foreign Body Response in Mice. Biomacromolecules, 2015, 16, 636-649. | 2.6 | 38 |
| 203 | Temperature effects for crystal growth: a distribution kinetics approach. Acta Materialia, 2003, 51, 2031-2040. | 3.8 | 37 |
| 204 | Degradation of Water Soluble Polymers under Combined Ultrasonic and Ultraviolet Radiation. Industrial & Engineering Chemistry Research, 2007, 46, 6204-6210. | 1.8 | 37 |
| 205 | Water gas shift reaction over multi-component ceria catalysts. Applied Catalysis B: Environmental, 2012, 123-124, 367-378. | 10.8 | 37 |
| 206 | Ionomer Based Blend as Water Vapor Barrier Material for Organic Device Encapsulation. ACS Applied Materials & Interfaces, 2013, 5, 4409-4416. | 4.0 | 37 |
| 207 | Lightweight polyaniline-cobalt coated fly ash cenosphere composite film for electromagnetic interference shielding. Electronic Materials Letters, 2016, 12, 603-609. | 1.0 | 37 |
| 208 | Magnetic Alloy@MWNT Heterostructure as Efficient Electromagnetic Wave Suppressors in Soft Nanocomposites. ChemistrySelect, 2017, 2, 7831-7844. | 0.7 | 37 |
| 209 | Thermal Degradation of Polystyrene by Lewis Acids in Solution. Industrial & Engineering Chemistry Research, 2002, 41, 657-660. | 1.8 | 36 |
| 210 | Distribution kinetics of Ostwald ripening at large volume fraction and with coalescence. Journal of Colloid and Interface Science, 2003, 261, 423-433. | 5.0 | 36 |
| 211 | Solubilities of Dodecanoic and Tetradecanoic Acids in Supercritical CO ₂ with and without Entrainers. Journal of Chemical & Engineering Data, 2008, 53, 2637-2641. | 1.0 | 36 |
| 212 | Kinetics of the ultrasonic degradation of poly (alkyl methacrylates). Ultrasonics Sonochemistry, 2009, 16, 273-279. | 3.8 | 36 |
| 213 | Structure, tensile properties and cytotoxicity assessment of sebacic acid based biodegradable polyesters with ricinoleic acid. Journal of Materials Chemistry B, 2013, 1, 865-875. | 2.9 | 36 |
| 214 | Photocatalytic degradation of poly(bisphenol-A-carbonate) in solution over combustion-synthesized TiO ₂ : mechanism and kinetics. Applied Catalysis A: General, 2004, 269, 81-90. | 2.2 | 35 |
| 215 | Hybrid nanocomposite films of polyvinyl alcohol and ZnO as interactive gas barrier layers for electronics device passivation. RSC Advances, 2012, 2, 11536. | 1.7 | 35 |
| 216 | Synthesis of nanosized Ce _{0.85} Mo _{0.1} Ru _{0.05} O ₂ (M=Si, Fe) solid solution exhibiting high CO oxidation and water gas shift activity. Applied Catalysis B: Environmental, 2013, 138-139, 51-61. | 10.8 | 35 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 217 | Nanoparticle-Driven Intermolecular Cooperativity and Miscibility in Polystyrene/Poly(vinyl methyl) Tj ETQq1 1 0.784314 rgBT /Overloc | 1.2 | 35 |
| 218 | Unusual Fragility and Cooperativity in Glass-Forming and Crystalline PVDF/PMMA Blends in the Presence of Multiwall Carbon Nanotubes. <i>Macromolecules</i> , 2015, 48, 2740-2750. | 2.2 | 35 |
| 219 | Effect of Tetralin on the Degradation of Polymer in Solution. <i>Industrial & Engineering Chemistry Research</i> , 1995, 34, 4222-4228. | 1.8 | 34 |
| 220 | Enzymatic Synthesis of Flavors in Supercritical Carbon Dioxide. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 1940-1945. | 1.8 | 34 |
| 221 | Biodegradable polymers for industrial applications. , 2005, , . | | 34 |
| 222 | Structural and Photocatalytic Activity of Lanthanide (Ce, Pr, and Nd) Molybdovanadates. <i>Journal of Physical Chemistry C</i> , 2007, 111, 6505-6511. | 1.5 | 34 |
| 223 | Polyvinylbutyral Based Hybrid Organic/Inorganic Films as a Moisture Barrier Material. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 4383-4394. | 1.8 | 34 |
| 224 | Positive temperature coefficient and structural relaxations in selectively localized MWNTs in PE/PEO blends. <i>RSC Advances</i> , 2014, 4, 4943. | 1.7 | 34 |
| 225 | Contrasting Effects of Graphene Oxide and Poly(ethylenimine) on the Polymorphism in Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /O | 1.4 | 34 |
| 226 | Solubilities of 10-undecenoic acid and geraniol in supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2016, 107, 384-391. | 1.6 | 34 |
| 227 | Investigation of nano Ag-decorated SiC particles for photoelectrocatalytic dye degradation and bacterial inactivation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 357, 118-131. | 2.0 | 34 |
| 228 | â€Trigger-freeâ€™ self-healable electromagnetic shielding material assisted by co-doped graphene nanostructures. <i>Chemical Engineering Journal</i> , 2020, 382, 122816. | 6.6 | 34 |
| 229 | Distribution Kinetics for Polymer Mixture Degradation. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 352-357. | 1.8 | 33 |
| 230 | Binder removal studies in ceramic thick shapes made by laminated object manufacturing. <i>Journal of the European Ceramic Society</i> , 2003, 23, 1013-1017. | 2.8 | 33 |
| 231 | Purifying Water Containing Both Anionic and Cationic Species Using a (Zn, Cu)O, ZnO, and Cobalt Ferrite Based Multiphase Adsorbent System. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 16384-16395. | 1.8 | 33 |
| 232 | Efficient interfacial charge transfer through plasmon sensitized Ag@Bi₂O₃ hierarchical photoanodes for photoelectrocatalytic degradation of chlorinated phenols. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 3710-3723. | 1.3 | 33 |
| 233 | Photocatalytic degradation of methyl methacrylate copolymers. <i>Polymer Degradation and Stability</i> , 2008, 93, 1440-1449. | 2.7 | 32 |
| 234 | Synthesis, characterization, redox and photocatalytic properties of Ce1âˆ™xPdxVO4 (0âˆ™xâˆ™0.1). <i>Applied Catalysis B: Environmental</i> , 2008, 84, 474-481. | 10.8 | 32 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 235 | Adsorption of cationic dyes on poly(acrylic acid-co-sodium acrylate-co-acrylamide) superabsorbents. <i>Journal of Applied Polymer Science</i> , 2012, 124, 3892-3899. | 1.3 | 32 |
| 236 | New Physical Insights into Shear History Dependent Polymorphism in Poly(vinylidene fluoride). <i>Crystal Growth and Design</i> , 2016, 16, 2937-2944. | 1.4 | 32 |
| 237 | Distributed midpoint chain scission in ultrasonic degradation of polymers. <i>AIChE Journal</i> , 2004, 50, 2258-2265. | 1.8 | 31 |
| 238 | Synthesis, Structure, and Photocatalysis in a New Structural Variant of the Aurivillius Phase: $\text{LiBi}_4\text{M}_3\text{O}_{14}$ (M = Nb, Ta). <i>Journal of Physical Chemistry B</i> , 2005, 109, 11442-11449. | 1.2 | 31 |
| 239 | ZnO-Au nano hybrids by rapid microwave-assisted synthesis for CO oxidation. <i>Dalton Transactions</i> , 2012, 41, 8762. | 1.6 | 31 |
| 240 | Highly photoactive heterostructures of PbO quantum dots on TiO ₂ . <i>RSC Advances</i> , 2013, 3, 20970. | 1.7 | 31 |
| 241 | Biodiesel synthesis from <i>Calophyllum inophyllum</i> oil with different supercritical fluids. <i>Bioresource Technology</i> , 2017, 241, 767-774. | 4.8 | 31 |
| 242 | Thermal and microwave-assisted oxidative degradation of poly(ethylene oxide). <i>Journal of Applied Polymer Science</i> , 2005, 96, 2090-2096. | 1.3 | 30 |
| 243 | Synthesis, structure, transformation studies and catalytic properties of open-framework cadmium thiosulfate compounds. <i>Dalton Transactions</i> , 2010, 39, 2263. | 1.6 | 30 |
| 244 | Synthesis and degradation of sorbitol-based polymers. <i>Journal of Applied Polymer Science</i> , 2011, 121, 2861-2869. | 1.3 | 30 |
| 245 | Controlled Release of Salicylic Acid from Biodegradable Cross-Linked Polyesters. <i>Molecular Pharmaceutics</i> , 2015, 12, 3479-3489. | 2.3 | 30 |
| 246 | Facile one-pot scalable strategy to engineer biocidal silver nanocluster assembly on thiolated PVDF membranes for water purification. <i>RSC Advances</i> , 2016, 6, 38972-38983. | 1.7 | 30 |
| 247 | Kinetics of CO oxidation over Cu doped Mn ₃ O ₄ . <i>Journal of Molecular Catalysis A</i> , 2016, 424, 106-114. | 4.8 | 30 |
| 248 | Visible light assisted improved photocatalytic activity of combustion synthesized spongy-ZnO towards dye degradation and bacterial inactivation. <i>RSC Advances</i> , 2016, 6, 80086-80098. | 1.7 | 30 |
| 249 | Phase specific dispersion of functional nanoparticles in soft nanocomposites resulting in enhanced electromagnetic screening ability dominated by absorption. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 467-479. | 1.3 | 30 |
| 250 | Ag and CuO impregnated on Fe doped ZnO for bacterial inactivation under visible light. <i>Catalysis Today</i> , 2018, 300, 71-80. | 2.2 | 30 |
| 251 | Conversion of <i>Shizochitrium limacinum</i> microalgae to biodiesel by non-catalytic transesterification using various supercritical fluids. <i>Bioresource Technology</i> , 2019, 288, 121538. | 4.8 | 30 |
| 252 | Synthesis and photoactivity of Pd substituted nano-TiO ₂ . <i>Journal of Molecular Catalysis A</i> , 2008, 291, 5-11. | 4.8 | 29 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 253 | CO oxidation by CeO ₂ –Al ₂ O ₃ –CeAlO ₃ hybrid oxides. <i>Catalysis Science and Technology</i> , 2011, 1, 1683. | 2.1 | 29 |
| 254 | Polyester derived from recycled poly(ethylene terephthalate) waste for regenerative medicine. <i>RSC Advances</i> , 2014, 4, 58805-58815. | 1.7 | 29 |
| 255 | High photoconductive combustion synthesized TiO ₂ derived nanobelts for photocatalytic water purification under solar irradiation. <i>New Journal of Chemistry</i> , 2015, 39, 6040-6051. | 1.4 | 29 |
| 256 | Experimental determination and theoretical correlation for the solubilities of dicarboxylic acid esters in supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2015, 101, 87-94. | 1.6 | 29 |
| 257 | Role of Ni in hetero-architected NiO/Ni composites for enhanced catalytic performance. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 13895-13908. | 1.3 | 29 |
| 258 | Wedge-like WO ₃ architectures for efficient electrochromism and photoelectrocatalytic activity towards water pollutants. <i>Molecular Catalysis</i> , 2017, 432, 76-87. | 1.0 | 29 |
| 259 | Selective cleavage of the polyphosphoester in crosslinked copper based nanogels: enhanced antibacterial performance through controlled release of copper. <i>Nanoscale</i> , 2017, 9, 12664-12676. | 2.8 | 29 |
| 260 | Interlocked Dithiolenes Decorated MoS ₂ Nanosheets as Molecular Sieves and Traps for Heavy Metal Ions. <i>Advanced Sustainable Systems</i> , 2019, 3, 1800153. | 2.7 | 29 |
| 261 | Water Remediation Aided by a Graphene-Oxide-Anchored Metal Organic Framework through Pore- and Charge-Based Sieving of Ions. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 1580-1590. | 3.2 | 29 |
| 262 | Effect of benzoyl peroxide on the ultrasonic degradation of poly(vinyl acetate). <i>Polymer Degradation and Stability</i> , 2001, 73, 33-38. | 2.7 | 28 |
| 263 | Influence of temperature on the ultrasonic degradation of poly(vinyl acetate) and poly(vinyl Tj ETQq1 1 0.784314 rggBT /Overlock 10 Tf | 1.8 | 28 |
| 264 | Effect of Alkyl-Group Substituents on the Degradation of Poly(alkyl methacrylates) in Supercritical Fluids. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 15-21. | 1.8 | 28 |
| 265 | Catalytic hydrogen combustion for treatment of combustible gases from fuel cell processors. <i>Applied Catalysis B: Environmental</i> , 2010, 100, 481-490. | 10.8 | 28 |
| 266 | Polymeric membranes derived from immiscible blends with hierarchical porous structures, tailored bio-interfaces and enhanced flux: Potential and key challenges. <i>Nano Structures Nano Objects</i> , 2018, 14, 149-165. | 1.9 | 28 |
| 267 | Continuous distribution theory for Ostwald ripening: comparison with the LSW approach. <i>Chemical Engineering Science</i> , 2003, 58, 2903-2909. | 1.9 | 27 |
| 268 | Growth and Ripening Kinetics of Crystalline Polymorphs. <i>Crystal Growth and Design</i> , 2003, 3, 981-990. | 1.4 | 27 |
| 269 | Effect of compatibilization on mechanical and thermal properties of polypropylene–soy flour composites. <i>Journal of Materials Science</i> , 2008, 43, 64-74. | 1.7 | 27 |
| 270 | Kinetics of enzymatic synthesis of geranyl butyrate by transesterification in various supercritical fluids. <i>Biochemical Engineering Journal</i> , 2010, 49, 250-255. | 1.8 | 27 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 271 | Unimpeded permeation of water through biocidal graphene oxide sheets anchored on to 3D porous polyolefinic membranes. <i>Nanoscale</i> , 2016, 8, 8048-8057. | 2.8 | 27 |
| 272 | Fatty acid methyl esters synthesis from non-edible vegetable oils using supercritical methanol and methyl tert -butyl ether. <i>Energy Conversion and Management</i> , 2017, 138, 77-83. | 4.4 | 27 |
| 273 | Development of Graphene Oxide-/Galactitol Polyester-Based Biodegradable Composites for Biomedical Applications. <i>ACS Omega</i> , 2017, 2, 5545-5556. | 1.6 | 27 |
| 274 | A new technique for measuring solubilities of organics in supercritical fluids. <i>Journal of Chemical & Engineering Data</i> , 1993, 38, 422-423. | 1.0 | 26 |
| 275 | Ultrasonic degradation of poly (styrene-co-alkyl methacrylate) copolymers. <i>Ultrasonics Sonochemistry</i> , 2010, 17, 819-826. | 3.8 | 26 |
| 276 | CeO ₂ -98PdO ₂ : Recyclable, ligand free palladium(II) catalyst for Heck reaction. <i>Journal of Chemical Sciences</i> , 2011, 123, 47-54. | 0.7 | 26 |
| 277 | Flexible poly(vinyl alcohol-co-ethylene)/modified MMT moisture barrier composite for encapsulating organic devices. <i>RSC Advances</i> , 2013, 3, 12831. | 1.7 | 26 |
| 278 | Polyanhydrides of Castor Oil & Sebacic Acid for Controlled Release Applications. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 7891-7901. | 1.8 | 26 |
| 279 | Impedance spectroscopy of novel hybrid composite films of polyvinylbutyral (PVB)/functionalized mesoporous silica. <i>Composites Part B: Engineering</i> , 2014, 58, 134-139. | 5.9 | 26 |
| 280 | Zinc and platinum co-doped ceria for WGS and CO oxidation. <i>Applied Catalysis B: Environmental</i> , 2017, 211, 137-147. | 10.8 | 26 |
| 281 | Nano tin ferrous oxide decorated graphene oxide sheets for efficient arsenic (III) removal. <i>Nano Structures Nano Objects</i> , 2018, 13, 82-92. | 1.9 | 26 |
| 282 | Continuous distribution kinetics for ultrasonic degradation of poly(methyl methacrylate). <i>Polymer International</i> , 2001, 50, 683-687. | 1.6 | 25 |
| 283 | Kinetics of Nonisothermal Polymer Crystallization. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18550-18557. | 1.2 | 25 |
| 284 | Thermal degradation of water soluble polymers and their binary blends. <i>Journal of Applied Polymer Science</i> , 2006, 101, 233-240. | 1.3 | 25 |
| 285 | Effect of Chain Length of Alcohol on the Lipase-Catalyzed Esterification of Propionic Acid in Supercritical Carbon Dioxide. <i>Applied Biochemistry and Biotechnology</i> , 2010, 160, 2342-2354. | 1.4 | 25 |
| 286 | Photocatalytic degradation of dyes over combustion-synthesized Ce _{1-x} FexVO ₄ . <i>Chemical Engineering Journal</i> , 2010, 158, 571-577. | 6.6 | 25 |
| 287 | Synthesis, structure, characterization and photocatalytic activity of Bi ₂ Zr ₂ O ₇ under solar radiation. <i>RSC Advances</i> , 2013, 3, 18938. | 1.7 | 25 |
| 288 | Visible light assisted photocatalytic degradation of organic dyes on TiO ₂ @CNT nanocomposites. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 73, 72-82. | 1.1 | 25 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 289 | Ultrathin Au nanowires supported on rGO/TiO ₂ as an efficient photoelectrocatalyst. Journal of Materials Chemistry A, 2015, 3, 17459-17468. | 5.2 | 25 |
| 290 | Synthesis of Octyl Palmitate in Various Supercritical Fluids. Industrial & Engineering Chemistry Research, 2004, 43, 7697-7701. | 1.8 | 24 |
| 291 | Photocatalytic degradation of phenol by base metal-substituted orthovanadates. Chemical Engineering Journal, 2010, 161, 136-145. | 6.6 | 24 |
| 292 | Modeling of ternary solubilities of solids in supercritical carbon dioxide in the presence of cosolvents or cosolutes. Journal of Supercritical Fluids, 2012, 63, 105-114. | 1.6 | 24 |
| 293 | Adsorption of anionic dyes on a reversibly swelling cationic superabsorbent polymer. Journal of Applied Polymer Science, 2013, 127, 2251-2258. | 1.3 | 24 |
| 294 | Poly(ester amide)s from Soybean Oil for Modulated Release and Bone Regeneration. ACS Applied Materials & Interfaces, 2016, 8, 25170-25184. | 4.0 | 24 |
| 295 | Biodegradable polyol-based polymers for biomedical applications. International Materials Reviews, 2019, 64, 288-309. | 9.4 | 24 |
| 296 | ZnO catalyzed transesterification of Madhuca indica oil in supercritical methanol. Fuel, 2019, 242, 323-333. | 3.4 | 24 |
| 297 | Continuous Distribution Kinetics for the Degradation of Polystyrene in Supercritical Benzene. Industrial & Engineering Chemistry Research, 2000, 39, 4020-4023. | 1.8 | 23 |
| 298 | Kinetics of Degradation of Polycarbonate in Supercritical and Subcritical Benzene. Industrial & Engineering Chemistry Research, 2002, 41, 5337-5340. | 1.8 | 23 |
| 299 | Effect of Metal Oxides/Chlorides on the Thermal Degradation of Poly(vinyl chloride), Poly(bisphenol) Tj ETQq1 1 0.784314 rgBT /Overlock 1.8 23 | 1.8 | 23 |
| 300 | Effect of the Alkyl Group Substituents on the Thermal and Enzymatic Degradation of Poly(n-alkyl) Tj ETQq0 0 0 rgBT /Overlock 1.8 23 | 1.8 | 23 |
| 301 | A novel scheelite-like structure of BaBi ₂ Mo ₄ O ₁₆ : Photocatalysis and investigation of the solid solution, BaBi ₂ Mo ₄ xW _x O ₁₆ (0.25 ≤ x ≤ 1). Journal of Photochemistry and Photobiology A: Chemistry, 2007, 187, 177-185. | 2.0 | 23 |
| 302 | Kinetics of photoconversion of cyclohexane and benzene by LnVO ₄ and LnMo _{0.15} V _{0.85} O ₄ (Ln = Ce, Pr) Tj ETQq0 0 0 rgBT /Overlock 2.2 23 | 2.2 | 23 |
| 303 | Synthesis, Characterization, and Photocatalytic Properties of ZrMo ₂ O ₈ . Journal of Physical Chemistry C, 2009, 113, 10661-10666. | 1.5 | 23 |
| 304 | A new semi-empirical model for correlating the solubilities of solids in supercritical carbon dioxide with cosolvents. Fluid Phase Equilibria, 2011, 310, 207-212. | 1.4 | 23 |
| 305 | Low temperature CO oxidation and water gas shift reaction over Pt/Pd substituted in Fe/TiO ₂ catalysts. International Journal of Hydrogen Energy, 2012, 37, 18798-18814. | 3.8 | 23 |
| 306 | Experimental determination and model correlation for the solubilities of trialkyl phosphates in supercritical carbon dioxide. RSC Advances, 2016, 6, 51286-51295. | 1.7 | 23 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 307 | Solubility of dialkylalkyl phosphonates in supercritical carbon dioxide: Experimental and modeling approach. <i>Fluid Phase Equilibria</i> , 2017, 435, 88-97. | 1.4 | 23 |
| 308 | Solubility of trioctylmethylammonium chloride in supercritical carbon dioxide and the influence of co-solvents on the solubility behavior. <i>Journal of Supercritical Fluids</i> , 2018, 138, 102-114. | 1.6 | 23 |
| 309 | Repercussion of Solid state vs. Liquid state synthesized p-n heterojunction RGO-copper phosphate on proton reduction potential in water. <i>Scientific Reports</i> , 2018, 8, 2881. | 1.6 | 23 |
| 310 | Suppressing Electromagnetic Radiation by Trapping Ferrite Nanoparticles and Carbon Nanotubes in Hierarchical Nanoporous Structures Designed by Crystallization-Induced Phase Separation. <i>ChemistrySelect</i> , 2018, 3, 1189-1201. | 0.7 | 23 |
| 311 | Fundamentals of Solids Extraction by Supercritical Fluids. , 1994, , 669-695. | | 23 |
| 312 | Dynamics of crystal size distributions with size-dependent rates. <i>Journal of Crystal Growth</i> , 2002, 243, 204-213. | 0.7 | 22 |
| 313 | Dynamics of lipase catalyzed enzymatic degradation of poly(bisphenol-A carbonate). <i>Journal of Applied Polymer Science</i> , 2004, 91, 2391-2396. | 1.3 | 22 |
| 314 | Thermodynamic modeling of the solubilities of fatty acids in supercritical fluids. <i>Fluid Phase Equilibria</i> , 2004, 220, 167-169. | 1.4 | 22 |
| 315 | The illustrative use of thiosulfate in the formation of new three-dimensional hybrid structures. <i>CrystEngComm</i> , 2009, 11, 55-57. | 1.3 | 22 |
| 316 | Solubilities of Benzene Derivatives in Supercritical Carbon Dioxide. <i>Journal of Chemical & Engineering Data</i> , 2011, 56, 1695-1699. | 1.0 | 22 |
| 317 | Thermal degradation kinetics of poly(trimethylol propane triacrylate)/poly(hexane diol diacrylate) interpenetrating polymer network. <i>Thermochimica Acta</i> , 2012, 547, 53-61. | 1.2 | 22 |
| 318 | Direct conversion of calcium carbonate to C1-C3 hydrocarbons. <i>RSC Advances</i> , 2013, 3, 7224. | 1.7 | 22 |
| 319 | Effects of temperature and clay content on water absorption characteristics of modified MMT clay/cyclic olefin copolymer nanocomposite films: Permeability, dynamic mechanical properties and the encapsulated organic device performance. <i>Composites Part B: Engineering</i> , 2015, 73, 1-9. | 5.9 | 22 |
| 320 | Poly(ester amide)s from Poly(ethylene terephthalate) Waste for Enhancing Bone Regeneration and Controlled Release. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 28281-28297. | 4.0 | 22 |
| 321 | Polyvinylbutyral-Polyaniline Nanocomposite for High Microwave Absorption Efficiency. <i>ACS Omega</i> , 2018, 3, 16542-16548. | 1.6 | 22 |
| 322 | Role of CO ₂ methanation into the kinetics of preferential CO oxidation on Cu/Co ₃ O ₄ . <i>Molecular Catalysis</i> , 2019, 466, 167-180. | 1.0 | 22 |
| 323 | Kinetics of microwave-assisted oxidative degradation of polystyrene in solution. <i>AIChE Journal</i> , 2003, 49, 1821-1826. | 1.8 | 21 |
| 324 | Ostwald ripening in two dimensions: Time dependence of size distributions for thin-film islands. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 5459. | 1.3 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 325 | Photodegradation of poly(vinyl alcohol) under UV and pulsed-laser irradiation in aqueous solution. <i>Journal of Applied Polymer Science</i> , 2006, 102, 958-966. | 1.3 | 21 |
| 326 | Kinetic Model for Transformation from Nanosized Amorphous TiO ₂ to Anatase. <i>Crystal Growth and Design</i> , 2007, 7, 250-253. | 1.4 | 21 |
| 327 | Synthesis of isoamyl laurate and isoamyl stearate in supercritical carbon dioxide. <i>Applied Biochemistry and Biotechnology</i> , 2007, 141, 139-147. | 1.4 | 21 |
| 328 | Selective Catalytic Reduction of NO _x : Mechanistic Perspectives on the Role of Base Metal and Noble Metal Ion Substitution. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 9240-9247. | 1.8 | 21 |
| 329 | Photocatalytic Degradation of Poly(Acrylamide-co-acrylic Acid). <i>Journal of Physical Chemistry B</i> , 2008, 112, 8928-8935. | 1.2 | 21 |
| 330 | Thermal and Photocatalytic Degradation of Poly(methyl methacrylate), Poly(butyl methacrylate), and Their Copolymers. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 6828-6834. | 1.8 | 21 |
| 331 | Synthesis and characterization of nano silicon and titanium nitride powders using atmospheric microwave plasma technique. <i>Journal of Chemical Sciences</i> , 2012, 124, 557-563. | 0.7 | 21 |
| 332 | Transition metal oxide loaded MCM catalysts for photocatalytic degradation of dyes. <i>Journal of Chemical Sciences</i> , 2012, 124, 385-393. | 0.7 | 21 |
| 333 | Dielectric impedance studies of poly(vinyl butyral)-nanosphere composite films. <i>Polymer Composites</i> , 2014, 35, 1636-1643. | 2.3 | 21 |
| 334 | Antibacterial and Antibiofouling Polymeric Membranes through Immobilization of Pyridine Derivative Leading to ROS Generation and Loss in Bacterial Membrane Integrity. <i>ChemistrySelect</i> , 2017, 2, 7965-7974. | 0.7 | 21 |
| 335 | Effect of hydrogen donors on polymer degradation. <i>Catalysis Today</i> , 1998, 40, 321-332. | 2.2 | 20 |
| 336 | Modeling of ternary solubilities of organics in supercritical carbon dioxide. <i>Fluid Phase Equilibria</i> , 2001, 187-188, 255-264. | 1.4 | 20 |
| 337 | Evolution to similarity solutions for polymerization and depolymerization with microwave radiation. <i>Polymer International</i> , 2001, 50, 1324-1330. | 1.6 | 20 |
| 338 | Lipase specificity for the hydrolysis of poly (vinyl acetate). <i>Polymer Degradation and Stability</i> , 2003, 80, 477-483. | 2.7 | 20 |
| 339 | Modeling the solubilities of high molecular weight n-alkanes in supercritical carbon dioxide. <i>Fluid Phase Equilibria</i> , 2004, 225, 59-62. | 1.4 | 20 |
| 340 | Effect of Alkyl Group Substituents, Temperature, and Solvents on the Ultrasonic Degradation of Poly(n-alkyl acrylates). <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 6572-6577. | 1.8 | 20 |
| 341 | Photooxidative and pyrolytic degradation of methyl methacrylate-alkyl acrylate copolymers. <i>Polymer Degradation and Stability</i> , 2009, 94, 1325-1335. | 2.7 | 20 |
| 342 | Temperature independent mixing rules to correlate the solubilities of antibiotics and anti-inflammatory drugs in SCCO ₂ . <i>Thermochimica Acta</i> , 2009, 496, 54-58. | 1.2 | 20 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 343 | Photocatalytic and Thermal Degradation of Poly(methyl methacrylate), Poly(butyl acrylate), and Their Copolymers. Industrial & Engineering Chemistry Research, 2009, 48, 1712-1718. | 1.8 | 20 |
| 344 | Ultrasonic degradation of poly(methyl methacrylate-co-alkyl acrylate) copolymers. Ultrasonics Sonochemistry, 2010, 17, 403-408. | 3.8 | 20 |
| 345 | Solubilities of Some Chlorophenols in Supercritical CO ₂ in the Presence and Absence of Cosolvents. Journal of Chemical & Engineering Data, 2010, 55, 273-277. | 1.0 | 20 |
| 346 | Noble metal ionic sites for catalytic hydrogen combustion: spectroscopic insights. Physical Chemistry Chemical Physics, 2011, 13, 708-718. | 1.3 | 20 |
| 347 | Role of lattice defects and crystallite morphology in the UV and visible-light-induced photo-catalytic properties of combustion-prepared TiO ₂ . Materials Chemistry and Physics, 2011, 126, 546-554. | 2.0 | 20 |
| 348 | Kinetic studies of ionic substituted copper catalysts for catalytic hydrogen combustion. Catalysis Today, 2012, 198, 270-279. | 2.2 | 20 |
| 349 | Ultrasonic degradation of butadiene, styrene and their copolymers. Ultrasonics Sonochemistry, 2012, 19, 503-508. | 3.8 | 20 |
| 350 | Synthesis and photocatalytic performance of quasi-fibrous ZnO. RSC Advances, 2014, 4, 55807-55814. | 1.7 | 20 |
| 351 | Performance of an ionomer blend-nanocomposite as an effective gas barrier material for organic devices. RSC Advances, 2014, 4, 11176. | 1.7 | 20 |
| 352 | Evolution of Surface Roughness During Electropolishing. Tribology Letters, 2014, 55, 93-101. | 1.2 | 20 |
| 353 | Mechanistic Insights and Kinetics of CO Oxidation over Pristine and Noble Metal Modified Fe ₂ O ₃ Using Diffuse Reflectance Infrared Fourier Transform Spectroscopy. Industrial & Engineering Chemistry Research, 2017, 56, 2008-2024. | 1.8 | 20 |
| 354 | Biodegradable galactitol based crosslinked polyesters for controlled release and bone tissue engineering. Materials Science and Engineering C, 2017, 77, 534-547. | 3.8 | 20 |
| 355 | Experimental measurements and correlation of the solubility of N,N-dialkylamides in supercritical carbon dioxide. Journal of Supercritical Fluids, 2019, 143, 162-170. | 1.6 | 20 |
| 356 | Does the nature of chemically grafted polymer onto PVDF decide the extent of electroactive β ₂ -polymorph?. Polymer, 2019, 181, 121764. | 1.8 | 20 |
| 357 | Photocatalytic Oxidative Degradation of Poly(alkyl acrylates) with NanoTiO ₂ . Industrial & Engineering Chemistry Research, 2008, 47, 2182-2190. | 1.8 | 19 |
| 358 | Synthesis, Structure, and Photocatalytic Activity in Orthorhombic Perovskites LnVO ₃ and Ln ^{1-x} Ti _x VO ₃ (Ln = Ce, Pr, and Nd). Industrial & Engineering Chemistry Research, 2009, 48, 7489-7497. | 1.8 | 19 |
| 359 | Solubility of <i>n</i> -(4-Ethoxyphenyl)ethanamide in Supercritical Carbon Dioxide. Journal of Chemical & Engineering Data, 2010, 55, 1437-1440. | 1.0 | 19 |
| 360 | Solution combustion synthesis of ¹³ (L)-Bi ₂ MoO ₆ and photocatalytic activity under solar radiation. Materials Research Bulletin, 2011, 46, 1252-1256. | 2.7 | 19 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 361 | Kinetics of carbon monoxide oxidation with $\text{Sn}_{0.95}\text{M}_{0.05}\text{O}_{2-x}$ ($M = \text{Tj, Et, Q, l, 1}$). <i>Journal of Applied Polymer Science</i> , 2014, 117, 1078-1084. | 2.1 | 19 |
| 362 | PE/PEO blends compatibilized by PE brush immobilized on MWNTs: improved interfacial and structural properties. <i>RSC Advances</i> , 2014, 4, 16250-16259. | 1.7 | 19 |
| 363 | The key role of polymer grafted nanoparticles in the phase miscibility of an LCST mixture. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 868-877. | 1.3 | 19 |
| 364 | Cooperative effect between BaTiO_3 and CaFe_2O_4 in a cocatalyst-free heterojunction composite for improved photochemical H_2 generation. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 22929-22941. | 3.8 | 19 |
| 365 | Continuous distribution kinetics for oxidative degradation of PMMA in solution. <i>Polymer Degradation and Stability</i> , 2001, 72, 537-541. | 2.7 | 18 |
| 366 | Kinetics of Catalytic Degradation of Polycarbonate in Benzene. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 687-691. | 1.8 | 18 |
| 367 | Thermal degradation kinetics of vinyl polyperoxide copolymers. <i>Polymer Degradation and Stability</i> , 2004, 84, 173-179. | 2.7 | 18 |
| 368 | Kinetics of Photocatalytic Reduction of NO by CO with Pd^{2+} -Ion-Substituted Nano- TiO_2 . <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 5798-5802. | 1.8 | 18 |
| 369 | NO reduction by H_2 over nano- $\text{Ce}_{0.98}\text{Pd}_{0.02}\text{O}_2$. <i>Catalysis Communications</i> , 2008, 9, 101-105. | 1.6 | 18 |
| 370 | Synthesis, characterization and photocatalytic activity of $\text{MxCe}_{1-x}\text{VO}_4$ ($M = \text{Li, Ca and Fe}$). <i>Applied Catalysis A: General</i> , 2009, 361, 32-41. | 2.2 | 18 |
| 371 | Kinetics of adsorption of methylene blue and rhodamine 6G on acrylic acid-based superabsorbents. <i>Journal of Applied Polymer Science</i> , 2012, 126, 463-472. | 1.3 | 18 |
| 372 | Anomalous structural relaxations in PVDF rich blends with PMMA in the presence of surface functionalized CNTs. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 23421-23430. | 1.3 | 18 |
| 373 | Size dependent structural relaxations and dielectric properties induced by surface functionalized MWNTs in poly(vinylidene fluoride)/poly(methyl methacrylate) blends. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2693. | 1.3 | 18 |
| 374 | Room Temperature Growth of Ultrathin Au Nanowires with High Areal Density over Large Areas by <i>in Situ</i> Functionalization of Substrate. <i>Langmuir</i> , 2014, 30, 12690-12695. | 1.6 | 18 |
| 375 | Enzymatic degradation of polycaprolactone-gelatin blend. <i>Materials Research Express</i> , 2015, 2, 045303. | 0.8 | 18 |
| 376 | In-situ synthesized poly(vinyl butyral)/MMT-clay nanocomposites: The role of degree of acetalization and clay content on thermal, mechanical and permeability properties of PVB matrix. <i>Composites Science and Technology</i> , 2015, 117, 417-427. | 3.8 | 18 |
| 377 | Enhanced preferential CO oxidation on Zn_2SnO_4 supported Au nanoparticles: support and H_2 effects. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14430-14436. | 5.2 | 18 |
| 378 | Nanodelivery in Scrolls-Based Nanocarriers: Efficient Constructs for Sustainable Scavenging of Heavy Metal Ions and Inactivate Bacteria. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18775-18784. | 3.2 | 18 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 379 | Solubilities of dialkylhydrogen phosphonates in supercritical carbon dioxide and their correlation using semi-empirical equations. <i>Separation Science and Technology</i> , 2019, 54, 1650-1660. | 1.3 | 18 |
| 380 | Non-catalytic transesterification of dry microalgae to fatty acid ethyl esters using supercritical ethanol and ethyl acetate. <i>Fuel</i> , 2020, 275, 117998. | 3.4 | 18 |
| 381 | Thermal degradation of ternary blends of poly(ϵ -caprolactone)/poly(vinyl acetate)/poly(vinyl Tj ETQq1 1 0.784314 rrgBT /Overlock 10 | 1.3 | 17 |
| 382 | Pulsed laser degradation of polyethylene oxide and polyacrylamide in aqueous solution. <i>Polymer Degradation and Stability</i> , 2005, 87, 521-526. | 2.7 | 17 |
| 383 | Oxidative and photooxidative degradation of poly(acrylic acid). <i>Polymer Degradation and Stability</i> , 2009, 94, 1238-1244. | 2.7 | 17 |
| 384 | An association and Wilson activity coefficient model for solubilities of aromatic solid pollutants in supercritical carbon dioxide. <i>Thermochimica Acta</i> , 2012, 541, 49-56. | 1.2 | 17 |
| 385 | Graphene-oxide-supported ultrathin Au nanowires: efficient electrocatalysts for borohydride oxidation. <i>Chemical Communications</i> , 2015, 51, 16856-16859. | 2.2 | 17 |
| 386 | Influence of MnO ₂ decorated Fe nano cauliflowers on microwave absorption and impedance matching of polyvinylbutyral (PVB) matrix. <i>Materials Research Express</i> , 2016, 3, 095003. | 0.8 | 17 |
| 387 | Catalytic behaviour of Mn ₂ .94M _{0.06} O ₄ - $\hat{\Gamma}$ (M=Pt, Ru and Pd) catalysts for low temperature water gas shift (WGS) and CO oxidation. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 10461-10474. | 3.8 | 17 |
| 388 | Denucleation rates during Ostwald ripening: Distribution kinetics of unstable clusters. <i>Journal of Chemical Physics</i> , 2002, 117, 6607-6613. | 1.2 | 16 |
| 389 | Synthesis, structure and photocatalytic properties of $\hat{\Gamma}$ ² -ZrMo ₂ O ₈ . <i>Bulletin of Materials Science</i> , 2009, 32, 337-342. | 0.8 | 16 |
| 390 | Solubilities of resorcinol and pyrocatechol and their mixture in supercritical carbon dioxide. <i>Thermochimica Acta</i> , 2011, 521, 41-48. | 1.2 | 16 |
| 391 | Tailoring the degradation rate and release kinetics from poly(galactitol sebacate) by blending with chitosan, alginate or ethyl cellulose. <i>International Journal of Biological Macromolecules</i> , 2016, 93, 1591-1602. | 3.6 | 16 |
| 392 | Trapping a Metastable Ferroelectric Phase by Size Reduction in Semiconducting Ferroelectric $\langle \text{BiFeO}_3 \rangle$ and its Implications for Photocatalytic Response. <i>Physical Review Applied</i> , 2017, 7, . | 1.5 | 16 |
| 393 | Behavioral analysis of simultaneous photo-electro-catalytic degradation of antibiotic resistant <i>E. coli</i> and antibiotic via ZnO/Cu: a kinetic and mechanistic study. <i>Nanoscale Advances</i> , 2019, 1, 3992-4008. | 2.2 | 16 |
| 394 | Enzymatic degradation of poly(D,L-lactide) and its blends with poly(vinyl acetate). <i>Journal of Applied Polymer Science</i> , 2006, 101, 675-680. | 1.3 | 15 |
| 395 | Continuous distribution kinetics for microwave-assisted oxidative degradation of poly(alkyl Tj ETQq1 1 0.784314 rrgBT /Overlock 10 | 1.8 | 15 |
| 396 | Synthesis and photocatalytic properties of Ag[Li _{1/3} Ru _{2/3}]O ₂ : A new delafossite oxide. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011, 176, 141-146. | 1.7 | 15 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 397 | Kinetics of sono-photooxidative degradation of poly(alkyl methacrylate)s. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 608-616. | 3.8 | 15 |
| 398 | Solubility of tri- <i>iso</i> -amyl phosphate in supercritical carbon dioxide and its application to selective extraction of uranium. <i>Separation Science and Technology</i> , 2017, 52, 2224-2237. | 1.3 | 15 |
| 399 | Continuous distribution kinetics for the thermal degradation of LDPE in solution. <i>Journal of Applied Polymer Science</i> , 2002, 84, 681-690. | 1.3 | 14 |
| 400 | Thermal Degradation of Poly(vinyl acetate) and Poly(μ -caprolactone) and Their Mixtures in Solution. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 1561-1567. | 1.8 | 14 |
| 401 | Neural Network Modeling of Adsorption Equilibria of Mixtures in Supercritical Fluids. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 7038-7041. | 1.8 | 14 |
| 402 | Synthesis, characterization, and degradation of biodegradable poly(mannitol citric dicarboxylate) copolyesters. <i>Polymer Engineering and Science</i> , 2011, 51, 2035-2043. | 1.5 | 14 |
| 403 | Synthesis and structure of Bi ₂ Ce ₂ O ₇ : a new compound exhibiting high solar photocatalytic activity. <i>Dalton Transactions</i> , 2012, 41, 9598. | 1.6 | 14 |
| 404 | Effect of silane functionalized alumina on poly(vinyl butyral) nanocomposite films: Thermal, mechanical, and moisture barrier studies. <i>Polymer Composites</i> , 2014, 35, 1426-1435. | 2.3 | 14 |
| 405 | Cyclic reaction network modeling for the kinetics of photoelectrocatalytic degradation. <i>Journal of Environmental Chemical Engineering</i> , 2014, 2, 780-787. | 3.3 | 14 |
| 406 | A Surlyn/magnesium oxide nanocomposite as an effective water vapor barrier for organic device encapsulation. <i>RSC Advances</i> , 2015, 5, 32580-32587. | 1.7 | 14 |
| 407 | Process mediated polymorphism, crystallographic texture and structure-property correlation in crystalline/amorphous blends. <i>Polymer</i> , 2018, 138, 307-319. | 1.8 | 14 |
| 408 | Influence of copper oxide grown on various conducting substrates towards improved performance for photoelectrocatalytic bacterial inactivation. <i>Molecular Catalysis</i> , 2018, 451, 161-169. | 1.0 | 14 |
| 409 | The journey of polycarbonate-based composites towards suppressing electromagnetic radiation. <i>Functional Composite Materials</i> , 2021, 2, . | 0.9 | 14 |
| 410 | Thermal degradation kinetics of poly(vinyl chloride-co-vinyl acetate). <i>Polymer Degradation and Stability</i> , 2002, 78, 519-524. | 2.7 | 13 |
| 411 | Thermal degradation kinetics of isotactic and atactic polypropylene. <i>Journal of Applied Polymer Science</i> , 2003, 90, 2206-2213. | 1.3 | 13 |
| 412 | Modeling of adsorption equilibria in supercritical fluids. <i>Journal of Supercritical Fluids</i> , 2004, 32, 161-166. | 1.6 | 13 |
| 413 | Temperature effects for isothermal polymer crystallization kinetics. <i>Journal of Chemical Physics</i> , 2005, 122, 244905. | 1.2 | 13 |
| 414 | Substitution Effect on the Photocatalytic Degradation by the Series A _x Bi _{26-x} Mo ₁₀ O _{68+0.5y} (A = Ba, y= 0); Tj ETQq0 0 0 rgBT /Overlock | 1.2 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 415 | Ultrasonic degradation of poly(acrylic acid). <i>Journal of Applied Polymer Science</i> , 2009, 112, 991-997. | 1.3 | 13 |
| 416 | Manipulation of the Hydration Levels in Minerals of Sodium Cadmium Bisulfate toward the Design of Functional Materials. <i>Crystal Growth and Design</i> , 2011, 11, 3213-3221. | 1.4 | 13 |
| 417 | Photocatalytic Degradation of Water Pollutants Using Nano-TiO ₂ . <i>Green Energy and Technology</i> , 2011, , 625-677. | 0.4 | 13 |
| 418 | Synthesis and characterization of silicone polymer/functionalized mesostructured silica composites. <i>Polymer Chemistry</i> , 2011, 2, 2643. | 1.9 | 13 |
| 419 | Photocatalytic Activity of Combustion Synthesized Nanocrystalline CeAlO ₃ . <i>Clean - Soil, Air, Water</i> , 2011, 39, 259-264. | 0.7 | 13 |
| 420 | Production of syngas from steam reforming and CO removal with water gas shift reaction over nanosized Zr _{0.95} Ru _{0.05} O _{2-δ} solid solution. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 13961-13973. | 3.8 | 13 |
| 421 | Layer-by-Layer Assembly of Nafion on Surlyn with Ultrahigh Water Vapor Barrier. <i>Langmuir</i> , 2014, 30, 14606-14611. | 1.6 | 13 |
| 422 | An unusual demixing behavior in PS-PMVE blends in the presence of nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 21300-21309. | 1.3 | 13 |
| 423 | Facile synthesis of aluminium cobalt oxide for dye adsorption. <i>Journal of Environmental Chemical Engineering</i> , 2014, 2, 2259-2268. | 3.3 | 13 |
| 424 | Shear induced crystallization in different polymorphic forms of PVDF induced by surface functionalized MWNTs in PVDF/PMMA blends. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 16492. | 1.3 | 13 |
| 425 | Effect of crosslinker on the swelling and adsorption properties of cationic superabsorbent. <i>Bulletin of Materials Science</i> , 2016, 39, 613-626. | 0.8 | 13 |
| 426 | Controlled release kinetics of p-aminosalicylic acid from biodegradable crosslinked polyesters for enhanced anti-mycobacterial activity. <i>Acta Biomaterialia</i> , 2016, 30, 168-176. | 4.1 | 13 |
| 427 | Critical Insights into the Effect of Shear, Shear History, and the Concentration of a Diluent on the Polymorphism in Poly(vinylidene fluoride). <i>Crystal Growth and Design</i> , 2017, 17, 1957-1965. | 1.4 | 13 |
| 428 | Spectroscopic and kinetic insights of Pt-dispersion over microwave-synthesized GO-supported Pt-TiO ₂ for CO oxidation. <i>Molecular Catalysis</i> , 2017, 432, 88-98. | 1.0 | 13 |
| 429 | Fabrication of Poly(Vinylidene Chloride-Co-Vinyl Chloride)/TiO ₂ Nanocomposite Films and Their Dielectric Properties. <i>Science of Advanced Materials</i> , 2014, 6, 946-953. | 0.1 | 13 |
| 430 | Renewable Energy via Photocatalysis. <i>Current Organic Chemistry</i> , 2013, 17, 2538-2558. | 0.9 | 13 |
| 431 | Optimum temperature for oxidative degradation of poly(vinyl acetate) in solution. <i>Chemical Engineering Science</i> , 2001, 56, 5085-5089. | 1.9 | 12 |
| 432 | Effect of metal ion doping on the photocatalytic activity of aluminophosphates. <i>Journal of Chemical Sciences</i> , 2010, 122, 771-785. | 0.7 | 12 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 433 | Polyaniline modified electrodes for detection of dyes. <i>Synthetic Metals</i> , 2011, 161, 659-664. | 2.1 | 12 |
| 434 | Nickel coated flyash (Ni-FAC) cenosphere doped polyaniline composite film for electromagnetic shielding. <i>Materials Research Express</i> , 2015, 2, 036403. | 0.8 | 12 |
| 435 | Localized delivery and enhanced osteogenic differentiation with biodegradable galactitol polyester elastomers. <i>RSC Advances</i> , 2016, 6, 61492-61504. | 1.7 | 12 |
| 436 | Maltitol-based biodegradable polyesters with tailored degradation and controlled release for bone regeneration. <i>RSC Advances</i> , 2016, 6, 40539-40551. | 1.7 | 12 |
| 437 | High-temperature transformation pathways for metastable ferromagnetic binary Heusler (Al ₅₅ Co ₄₅ Mn) alloy. <i>Journal of Materials Science</i> , 2017, 52, 4109-4119. | 1.7 | 12 |
| 438 | Influence of adsorption on the measurement of diffusion coefficients by Taylor dispersion. <i>International Journal of Thermophysics</i> , 1996, 17, 373-389. | 1.0 | 11 |
| 439 | Dynamics of molecular weight distributions for polymer scission. <i>AIChE Journal</i> , 2001, 47, 2539-2547. | 1.8 | 11 |
| 440 | Title is missing!. <i>Catalysis Letters</i> , 2003, 88, 73-81. | 1.4 | 11 |
| 441 | Correlations for binary phase equilibria in high-pressure carbon dioxide. <i>Fluid Phase Equilibria</i> , 2005, 238, 174-179. | 1.4 | 11 |
| 442 | Thermal degradation of poly(ethylene oxide) and polyacrylamide with ascorbic acid. <i>Journal of Applied Polymer Science</i> , 2006, 101, 3067-3072. | 1.3 | 11 |
| 443 | Degradation kinetics of poly(HDDA-co-MMA). <i>Journal of Applied Polymer Science</i> , 2010, 117, 2444-2453. | 1.3 | 11 |
| 444 | Synthesis, structure and ionic conductivity in scheelite type Li _{0.5} Ce _{0.5-x} Ln _x MoO ₄ (x = 0 and 0.25, Ln) Tj ETQ ₀ 0 0 0 reBT /Overlo | 0.7 | 11 |
| 445 | Solubilities of <i>n</i> -Butyl Esters in Supercritical Carbon Dioxide. <i>Journal of Chemical & Engineering Data</i> , 2014, 59, 3329-3334. | 1.0 | 11 |
| 446 | A self-assembling polycationic nanocarrier that exhibits exceptional gene transfection efficiency. <i>RSC Advances</i> , 2015, 5, 91619-91632. | 1.7 | 11 |
| 447 | TiO ₂ /EVOH based reactive interlayer in Surlyn for organic device encapsulation. <i>Materials Research Express</i> , 2016, 3, 025302. | 0.8 | 11 |
| 448 | Microkinetic Modeling of CO Oxidation on Ionic Palladium-Substituted Ceria. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 2309-2318. | 1.8 | 11 |
| 449 | Aluminium and rhodium co-doped ceria for water gas shift reaction and CO oxidation. <i>Molecular Catalysis</i> , 2018, 451, 4-12. | 1.0 | 11 |
| 450 | PVDF-MWNT interactions control process induced β -lamellar morphology and orientation in the nanocomposites. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 24821-24831. | 1.3 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 451 | Photocatalytic NO _x Abatement: A Short Review. Current Organic Chemistry, 2015, 19, 2122-2131. | 0.9 | 11 |
| 452 | Effect of hydrogen donor on the thermal degradation of poly(vinyl acetate) in solution. Journal of Applied Polymer Science, 2001, 81, 1996-2000. | 1.3 | 10 |
| 453 | Modeling the chromatographic response of inverse size-exclusion chromatography. Chemical Engineering Science, 2001, 56, 6511-6524. | 1.9 | 10 |
| 454 | Catalytic degradation of polybutadiene. Polymer Degradation and Stability, 2004, 86, 529-533. | 2.7 | 10 |
| 455 | Cluster kinetics and dynamics during spinodal decomposition. Journal of Chemical Physics, 2006, 124, 024713. | 1.2 | 10 |
| 456 | Mixture solubilities of nitrobenzoic acid isomers in supercritical carbon dioxide. Journal of Supercritical Fluids, 2012, 70, 66-74. | 1.6 | 10 |
| 457 | Dispersed ZrO ₂ nanoparticles in MCM-48 with high adsorption activity. AIChE Journal, 2012, 58, 2987-2996. | 1.8 | 10 |
| 458 | Albumin-mediated incorporation of water-insoluble therapeutics in layer-by-layer assembled thin films and microcapsules. Journal of Materials Chemistry B, 2013, 1, 4819. | 2.9 | 10 |
| 459 | Organic passivation layer on flexible Surlyn substrate for encapsulating organic photovoltaics. Applied Physics Letters, 2014, 105, . | 1.5 | 10 |
| 460 | Thermally flexible epoxy/cellulose blends mediated by an ionic liquid. RSC Advances, 2015, 5, 52832-52836. | 1.7 | 10 |
| 461 | Alkylation of Fatty Acids in Supercritical Alcohols. Energy & Fuels, 2016, 30, 4104-4111. | 2.5 | 10 |
| 462 | Crystallization Induced Phase Separation: Unique Tool to Design Microfiltration Membranes with High Flux and Sustainable Antibacterial Surface. Industrial & Engineering Chemistry Research, 2017, 56, 2025-2035. | 1.8 | 10 |
| 463 | Microbial Biofilm Membranes for Water Remediation and Photobiocatalysis. ACS Symposium Series, 2019, , 321-351. | 0.5 | 10 |
| 464 | Transition Metal (Ni, Cu and Fe) Substituted Co ₃ O ₄ @ ZrO ₂ Catalysts for Lean Methane Combustion. Topics in Catalysis, 2021, 64, 243-255. | 1.3 | 10 |
| 465 | Ultrathin structures derived from interfacially modified polymeric nanocomposites to curb electromagnetic pollution. Nanoscale Advances, 2021, 3, 2632-2648. | 2.2 | 10 |
| 466 | Thermal degradation kinetics of para-substituted poly (styrene peroxide)s in solution. Journal of Applied Polymer Science, 2002, 86, 957-961. | 1.3 | 9 |
| 467 | A Distribution Kinetics Approach for Crystallization of Polymer Blends. Journal of Physical Chemistry B, 2006, 110, 15198-15204. | 1.2 | 9 |
| 468 | Analysis of oxide and vanadate supports for catalytic hydrogen combustion: Kinetic and mechanistic investigations. AIChE Journal, 2012, 58, 932-945. | 1.8 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 469 | Metal-metal charge transfer and interfacial charge transfer mechanism for the visible light photocatalytic activity of cerium and nitrogen co-doped TiO ₂ . Journal of Sol-Gel Science and Technology, 2014, 71, 193-203. | 1.1 | 9 |
| 470 | Improving antifouling ability by site-specific silver decoration on polyethylene ionomer membranes for water remediation: assessed using 3D micro computed tomography, water flux and antibacterial studies. RSC Advances, 2016, 6, 88057-88065. | 1.7 | 9 |
| 471 | Experimental solubilities of two lipid derivatives in supercritical carbon dioxide and new correlations based on activity coefficient models. RSC Advances, 2016, 6, 17772-17781. | 1.7 | 9 |
| 472 | Evaluation of new density based model to correlate the solubilities of ricinoleic acid, methyl ricinoleate and methyl 10-undecenoate in supercritical carbon dioxide. Journal of Supercritical Fluids, 2017, 130, 357-363. | 1.6 | 9 |
| 473 | Kinetics of non-catalytic synthesis of bis(2-ethylhexyl)sebacate at high pressures. Reaction Chemistry and Engineering, 2017, 2, 27-35. | 1.9 | 9 |
| 474 | Catalytic synthesis of fatty acid methyl esters from Madhuca indica oil in supercritical methanol. Energy Conversion and Management, 2018, 173, 412-425. | 4.4 | 9 |
| 475 | Studies to improve the actuation capability of low-frequency IPMC actuators for underwater robotic applications. ISSS Journal of Micro and Smart Systems, 2019, 8, 41-47. | 1.0 | 9 |
| 476 | Hydrolysis of p-nitrophenyl laurate in supercritical carbon dioxide: comparison of two different enzymes. Journal of Chemical Technology and Biotechnology, 2001, 76, 890-892. | 1.6 | 8 |
| 477 | Oxidative degradation of poly (vinyl acetate) and poly (μ -caprolactone) and their mixtures in solution. Chemical Engineering Science, 2004, 59, 1577-1587. | 1.9 | 8 |
| 478 | Cluster kinetics of density relaxation in granular materials. Physical Review E, 2004, 70, 051311. | 0.8 | 8 |
| 479 | Cluster kinetics of granular mixing. AIChE Journal, 2005, 51, 406-414. | 1.8 | 8 |
| 480 | A Single-Stage Water-Gas Shift Reaction over Highly Active and Stable Si- and Al-Substituted Pt/CeO ₂ Catalysts. ChemCatChem, 2012, 4, 1968-1978. | 1.8 | 8 |
| 481 | Experimental determination and activity coefficient based models for mixture solubilities of nitrophenol isomers in supercritical carbon dioxide. Journal of Supercritical Fluids, 2013, 79, 2-10. | 1.6 | 8 |
| 482 | Encapsulation for Improving the Efficiencies of Solar Cells. Nanostructure Science and Technology, 2014, , 23-40. | 0.1 | 8 |
| 483 | Aminosilane Functionalized Cenosphere in Poly(vinyl butyral) Composite Films: Moisture Resistant Encapsulated Schottky Devices. Polymer-Plastics Technology and Engineering, 2014, 53, 684-692. | 1.9 | 8 |
| 484 | Predicting Pathways for Synthesis of Ferromagnetic γ , Phase in Binary Heusler Alloy Al-55 pct Mn Through Understanding of the Kinetics of μ - γ , Transformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 6555-6568. | 1.1 | 8 |
| 485 | Esterification of Sebacic Acid in Near-Critical and Supercritical Methanol. Industrial & Engineering Chemistry Research, 2017, 56, 2641-2649. | 1.8 | 8 |
| 486 | Superior adsorption capacity of strontium titanate and titania composites for anionic dyes removal. Journal of Environmental Chemical Engineering, 2017, 5, 4663-4675. | 3.3 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 487 | Degradable poly(ester amide)s from olive oil for biomedical applications. <i>Emergent Materials</i> , 2019, 2, 153-168. | 3.2 | 8 |
| 488 | Effect of temperature on the ultrasonic degradation of polyacrylamide and poly(ethylene oxide). , 2004, 84, 341-341. | | 8 |
| 489 | Thermal degradation studies of para-substituted poly(styrene peroxide)s. <i>Polymer Degradation and Stability</i> , 2002, 76, 511-514. | 2.7 | 7 |
| 490 | Continuous Distribution Kinetics for Photopolymerization of Alkyl Methacrylates. <i>Macromolecular Reaction Engineering</i> , 2009, 3, 556-567. | 0.9 | 7 |
| 491 | Synthesis of new (Bi, La) ₃ MSb ₂ O ₁₁ phases (M = Cr, Mn, Fe) with KSbO ₃ -type structure and their magnetic and photocatalytic properties. <i>Bulletin of Materials Science</i> , 2011, 34, 271-277. | 0.8 | 7 |
| 492 | Kinetics and mechanism for dye degradation with ionic Pd-substituted ceria. <i>Applied Catalysis A: General</i> , 2011, 395, 39-48. | 2.2 | 7 |
| 493 | Polymer microfabrication by scanning based microstereolithography: Optical design and material functionality. <i>Review of Scientific Instruments</i> , 2012, 83, 095003. | 0.6 | 7 |
| 494 | Thermomechanical and fractographic behavior of poly (HDDA-co-MMA): a study for its application in microcantilever sensors. <i>Polymers for Advanced Technologies</i> , 2012, 23, 1604-1611. | 1.6 | 7 |
| 495 | Photo, thermal, and ultrasonic degradation of EGDMA-crosslinked poly(acrylic acid-co-sodium) Tj ETQq1.1 0.784314 rgB1.3 | 1.3 | 7 |
| 496 | Measurement and correlation of quaternary solubilities of dihydroxybenzene isomers in supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2013, 73, 63-69. | 1.6 | 7 |
| 497 | Zirconia doped barium titanate induced electroactive β polymorph in PVDF-HFP: high energy density and dielectric properties. <i>Materials Research Express</i> , 2014, 1, 045301. | 0.8 | 7 |
| 498 | Antibacterial Membranes for Water Remediation with Controlled Leaching of Biocidal Silver Aided by Prior Grafting of Poly(ethylene imine) on to Ozone-treated Polyethylene. <i>ChemistrySelect</i> , 2017, 2, 624-631. | 0.7 | 7 |
| 499 | Controlled release from aspirin based linear biodegradable poly(anhydride esters) for anti-inflammatory activity. <i>International Journal of Pharmaceutics</i> , 2017, 528, 732-740. | 2.6 | 7 |
| 500 | Controlled Release of Usnic Acid from Biodegradable Polyesters to Inhibit Biofilm Formation. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 291-303. | 2.6 | 7 |
| 501 | Tailored Degradation and Dye Release from Poly(ester amides). <i>Polymer-Plastics Technology and Engineering</i> , 2017, 56, 635-646. | 1.9 | 7 |
| 502 | Blends of poly(μ -caprolactone) and poly(vinyl acetate): mechanical properties and thermal degradation. , 2004, 84, 345-345. | | 7 |
| 503 | Degradation Kinetics for Polymer Mixtures in Solution. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 1306-1311. | 1.8 | 6 |
| 504 | Degradation kinetics of poly(vinyl acetate) in the presence of aluminum chloride. <i>Polymer Degradation and Stability</i> , 2001, 73, 83-86. | 2.7 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 505 | Tracer mixing dynamics during aggregation and fragmentation. <i>AICHE Journal</i> , 2002, 48, 2167-2178. | 1.8 | 6 |
| 506 | Kinetics and reactive mixing: Fragmentation and coalescence in turbulent fluids. <i>AICHE Journal</i> , 2004, 50, 835-847. | 1.8 | 6 |
| 507 | A mechanistic model for the water-gas shift reaction over noble metal substituted ceria. <i>AICHE Journal</i> , 2010, 56, 1315-1324. | 1.8 | 6 |
| 508 | Photocatalytic Activity of Microwave Plasma-Synthesized TiO ₂ Nanopowder. <i>Plasma Chemistry and Plasma Processing</i> , 2010, 30, 461-470. | 1.1 | 6 |
| 509 | Photo and Thermal Degradation of a Cationic Superabsorbent Polymer. <i>Polymer-Plastics Technology and Engineering</i> , 2013, 52, 58-65. | 1.9 | 6 |
| 510 | Kinetics of CO oxidation on palladium using microkinetics coupled with reaction route analysis. <i>Chemical Engineering Science</i> , 2015, 131, 271-281. | 1.9 | 6 |
| 511 | Influence of Mesoporous Silica and Butyral Content on the Mechanical, Water Absorption, and Permeability Properties of in situ Synthesized Silica/PVB Nanocomposite Films. <i>Polymer-Plastics Technology and Engineering</i> , 2016, 55, 1220-1230. | 1.9 | 6 |
| 512 | Microkinetic Modeling of CO Oxidation over FePt-Decorated Graphene Oxide. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 8465-8473. | 1.8 | 6 |
| 513 | Kinetics of esterification of 10-undecenoic and ricinoleic acids with near-critical and supercritical methanol. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1425-1436. | 2.5 | 6 |
| 514 | Analysis on enhancing the sensing behavior of ionic polymer metal composite based sensors. <i>Journal of Intelligent Material Systems and Structures</i> , 2021, 32, 420-429. | 1.4 | 6 |
| 515 | Kinetics of the enzymatic degradation of poly(vinyl acetate) in solution. <i>Journal of Applied Polymer Science</i> , 2003, 89, 2579-2582. | 1.3 | 5 |
| 516 | Nucleation, growth, and coarsening for two- and three-dimensional phase transitions. <i>Journal of Crystal Growth</i> , 2005, 279, 466-476. | 0.7 | 5 |
| 517 | Mixing Effects on Particle Precipitation. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 5267-5274. | 1.8 | 5 |
| 518 | Effect of Chain Length on Enzymatic Hydrolysis of p-Nitrophenyl Esters in Supercritical Carbon Dioxide. <i>Applied Biochemistry and Biotechnology</i> , 2008, 144, 213-223. | 1.4 | 5 |
| 519 | Mechanistic overview of the curing behavior of hydride terminated polydimethylsiloxane with allyl functionalized alumina by calorimetry and rheometry. <i>Thermochimica Acta</i> , 2011, 524, 74-79. | 1.2 | 5 |
| 520 | Combustion synthesized vanadia rods for environmental applications. <i>AICHE Journal</i> , 2011, 57, 2215-2228. | 1.8 | 5 |
| 521 | Water Vapor Barrier Material by Covalent Self-Assembly for Organic Device Encapsulation. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 17894-17900. | 1.8 | 5 |
| 522 | The influence of mesoporous silica in low T _g cyclic olefin copolymer nanocomposite films: Mechanical and moisture barrier studies. <i>Composites Science and Technology</i> , 2014, 96, 80-87. | 3.8 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 523 | Photochemical detoxification of Cr(VI) using iron and saccharic acid: insights from cytotoxic and genotoxic assays. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 1152-1162. | 1.2 | 5 |
| 524 | Gradient platform for combinatorial screening of thermoset polymers for biomedical applications. <i>Materials Science and Engineering C</i> , 2019, 94, 766-777. | 3.8 | 5 |
| 525 | Exploring the pathways for enhancing the hard magnetic properties of binary Al-55at.%Mn Heusler alloy through mechanical alloying. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 439, 181-187. | 1.0 | 5 |
| 526 | Kinetics for thermal degradation of polystyrene in presence of p-toluene sulfonic acid. <i>Journal of Environmental Management</i> , 2002, 7, 117-121. | 1.7 | 4 |
| 527 | Influence of HZSM-5 catalyst on the thermal degradation of poly(vinyl chloride) in solution. <i>Journal of Applied Polymer Science</i> , 2002, 84, 791-796. | 1.3 | 4 |
| 528 | Determination of viscosities for alumina-polyethylene blends. <i>Journal of Materials Science</i> , 2002, 37, 1333-1336. | 1.7 | 4 |
| 529 | Population Balance Modeling of Turbulent Mixing for Miscible Fluids. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2005, 127, 564-571. | 0.8 | 4 |
| 530 | A distribution kinetics model of self-assembly: Effects of coalescence and solvent evaporation. <i>Journal of Crystal Growth</i> , 2006, 286, 131-136. | 0.7 | 4 |
| 531 | Effect of Oxidizers on Microwave-Assisted Oxidative Degradation of Poly(alkyl acrylates). <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 7538-7544. | 1.8 | 4 |
| 532 | Effect of bismuth substitution on crystal chemistry, photocatalysis and conductivity in Sr ₃ V ₂ O ₈ : a new structural type in palmierite class. <i>RSC Advances</i> , 2012, 2, 10505. | 1.7 | 4 |
| 533 | Study of Thermal Relaxation of Poly (HDDA-co-MMA) by Temperature Modulated DSC and Dielectric Spectroscopy. <i>Polymer-Plastics Technology and Engineering</i> , 2013, 52, 485-494. | 1.9 | 4 |
| 534 | Water vapor permeabilities through polymers: diffusivities from experiments and simulations. <i>Materials Research Express</i> , 2014, 1, 035301. | 0.8 | 4 |
| 535 | Simple three parameter equations for correlating liquid phase compositions in subcritical and supercritical systems. <i>Journal of Supercritical Fluids</i> , 2014, 95, 100-105. | 1.6 | 4 |
| 536 | Reactive interlayer based ultra-low moisture permeable membranes for organic photovoltaic encapsulation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23165-23172. | 1.3 | 4 |
| 537 | Nanomaterial-based ionic polymer metal composite insect scale flapping wing actuators. <i>Mechanics of Advanced Materials and Structures</i> , 2016, 23, 1300-1311. | 1.5 | 4 |
| 538 | Physical insights into salicylic acid release from poly(anhydrides). <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 2112-2119. | 1.3 | 4 |
| 539 | Potential of hydrogen peroxide mediated water decontamination using thioglycolic acid. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 2200-2205. | 3.3 | 4 |
| 540 | Kinetics of thermal degradation of vinyl polyperoxides in solution. <i>Polymer Degradation and Stability</i> , 2002, 76, 161-170. | 2.7 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 541 | Enzymatic degradation of polymers. , 2005, , 411-440. | | 3 |
| 542 | Cluster kinetics model of particle separation in vibrated granular media. Physical Review E, 2006, 73, 011301. | 0.8 | 3 |
| 543 | A fragmentation model for crystal attrition. Journal of Crystal Growth, 2007, 305, 211-217. | 0.7 | 3 |
| 544 | Distribution Kinetic Approach for Separation of Polymorphs. Chemical Engineering Research and Design, 2007, 85, 1355-1361. | 2.7 | 3 |
| 545 | Thermal and sonochemical degradation kinetics of poly(<i>n</i> -butyl methacrylate-co-alkyl) Tj ETQq1 1 0.784314 rgBT Engineering and Science, 2013, 53, 1542-1553. | 1.5 | 3 |
| 546 | Effect of solvents on the enzyme mediated degradation of copolymers. Materials Research Express, 2015, 2, 095301. | 0.8 | 3 |
| 547 | Microkinetic model for WGS over ionic platinum substituted ceria under r-WGS conditions. International Journal of Hydrogen Energy, 2017, 42, 23891-23898. | 3.8 | 3 |
| 548 | Effect of aluminum chloride and Pt/ TiO2 on the thermal degradation of poly(vinyl chloride) in solution. Journal of Applied Polymer Science, 2003, 90, 3532-3535. | 1.3 | 2 |
| 549 | Kinetics and dynamics of gelation reactions. Chemical Engineering Science, 2007, 62, 5257-5263. | 1.9 | 2 |
| 550 | CLUSTER KINETICS OF PHASE TRANSITIONS: APPLICATIONS TO INNOVATIVE TECHNOLOGIES. Chemical Engineering Communications, 2008, 196, 204-233. | 1.5 | 2 |
| 551 | CLUSTER KINETICS AND DYNAMICS OF OSCILLATOR SYNCHRONIZATION. International Journal of Modern Physics B, 2008, 22, 889-900. | 1.0 | 2 |
| 552 | Enzymatic Degradation of Poly(soybean oil-g-methyl methacrylate). Journal of Polymer Engineering, 2010, 30, . | 0.6 | 2 |
| 553 | Effect of Zr ⁴⁺ -ion substitution in CeO ₂ on H ₂ O ₂ -assisted degradation of orange G. Catalysis Communications, 2011, 12, 940-945. | 1.6 | 2 |
| 554 | Poly-HDDA microstructure fabrication using microstereolithography for microcantilever-based sensor technology. , 2011, , . | | 2 |
| 555 | Semi empirical models for selectivity of supercritical carbon dioxide for solid mixtures. Separation and Purification Technology, 2012, 89, 181-188. | 3.9 | 2 |
| 556 | Lipase mediated enzymatic degradation of polydioxanone in solution. Polymer Degradation and Stability, 2014, 110, 284-289. | 2.7 | 2 |
| 557 | Novel poly (vinyl butyral) (PVB)/polyaniline-cenosphere composite film for EMI shielding. AIP Conference Proceedings, 2016, , . | 0.3 | 2 |
| 558 | Critical insights into the effect of shear on in situ reduction of graphene oxide in PVDF: assessing by rheo-dielectric measurements. Materials Research Express, 2016, 3, 065301. | 0.8 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 559 | Microwave absorption property of PVB-polyaniline nanocomposite. , 2017, , . | | 2 |
| 560 | Catalytic Synthesis of CO Free Hydrogen. , 2013, , 223-252. | | 1 |
| 561 | PVDF membranes containing hybrid nanoparticles for adsorbing cationic dyes: physical insights and mechanism. Materials Research Express, 2016, 3, 075303. | 0.8 | 1 |
| 562 | Experimental determination and development of solution theory based model for the mixture solubilities of 10-undecenoic acid with methyl 10-undecenoate and methyl ricinoleate in supercritical carbon dioxide. Journal of Supercritical Fluids, 2018, 137, 74-80. | 1.6 | 1 |
| 563 | Experimental determination and association model for the solubilities of methyl 10-undecenoate with methyl ricinoleate in supercritical carbon dioxide. Journal of Supercritical Fluids, 2018, 139, 80-87. | 1.6 | 1 |
| 564 | Continuous distribution kinetics for the thermal degradation of LDPE in solution. Journal of Applied Polymer Science, 2002, 84, 681. | 1.3 | 1 |
| 565 | Supercritical fluid extraction of organic pollutants from soil combined with adsorption onto activated carbon. Waste Management, 1993, 13, 514. | 3.7 | 0 |
| 566 | Chemical Kinetics in Dispersed-Phase Reactors. International Journal of Chemical Reactor Engineering, 2003, 1, . | 0.6 | 0 |
| 567 | Thermodynamic modeling of the solubilities of fatty acids in supercritical fluids. Fluid Phase Equilibria, 2004, 220, 167-167. | 1.4 | 0 |
| 568 | Synthesis, Structure, and Photocatalysis in a New Structural Variant of the Aurivillius Phase: LiBi ₄ M ₃ O ₁₄ (M: Nb, Ta).. ChemInform, 2005, 36, no. | 0.1 | 0 |
| 569 | Chapter 23 Crystal Growth and Dissolution with Breakage: Distribution Kinetics Modelling. Handbook of Powder Technology, 2007, , 971-988. | 0.1 | 0 |
| 570 | Photocatalytic Inactivation of Escherichia coli with LbL Fabricated Immobilized TiO ₂ Thin Films. Journal of Advanced Oxidation Technologies, 2011, 14, . | 0.5 | 0 |